

**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

**REPORT ON THE
AUDIT OF METROPOLITAN'S 2010 CHARGES
FOR WATER SUPPLY FROM THE STATE WATER
PROJECT
ISSUED BY STATE OF CALIFORNIA DEPARTMENT OF
WATER RESOURCES**

RICHARDSON & COMPANY

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Report On the Audit of the 2010 Statement of Charges and Special Projects Related to Charges and Payments Under State Water Project Contract

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INDEPENDENT AUDITOR'S REPORT

The Metropolitan Water District
of Southern California
Los Angeles, California

We have audited the accompanying 2010 State Water Project Charges submitted to the Metropolitan Water District of Southern California (Metropolitan) by the State of California Department of Water Resources (Department). This Statement of Charges is the responsibility of the Department's management. Our responsibility is to express an opinion on this Statement of Charges based on our audit.

Except as described in the following paragraph, we conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Statement of Charges is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts in the Statement of Charges. An audit also includes assessing the accounting practices used and significant estimates made by the Department's management for conformity with our understanding of Metropolitan's Water Supply Contract. The audit also includes evaluating the overall Statement of Charges presentation. We believe that our audit provides a reasonable basis for our opinion.

In conformity with the requirements of Metropolitan's Water Supply Contract with the Department, a significant portion of the Statement of Charges is based on current estimates of future costs which are not susceptible to audit verification. The Statement is also based on interpretations made by the Department's management relating to various provisions of the Water Supply Contract. Many of these interpretations are the subject of ongoing negotiations. In addition, Metropolitan's contract provides that any overpayment or underpayment, by reason of error in computation or other causes, shall be adjusted in the next succeeding year. Accordingly, the Statement of Charges issued to Metropolitan is a tentative billing which is subject to adjustment when final costs are known and when resolution of unsettled issues such as described in our reports and others are agreed upon.

In our opinion, except for the effects of such adjustments, if any, as might have been determined to be necessary if the matters described in the preceding paragraph were susceptible to audit verification, the 2010 Statement of Charges referred to in the first paragraph is fairly presented, in all material respects, in conformity with the provisions of Metropolitan's Water Supply Contract as we understand them.

This report is intended solely for the information and use of Metropolitan and the Department and is not intended to be and should not be used by anyone other than these specified parties.

Richardson & Company

November 30, 2009

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
2010 STATE WATER PROJECT CHARGES

	Cost Components			
	Variable ^{1/}	Minimum	Capital	Total
<u>WATER SUPPLY CONTRACT</u>				
Transportation Charge	\$ 202,097,138	\$ 133,679,267	\$ 61,343,827 ^{2/}	\$ 397,120,232
Off-Aqueduct Power Facilities Charge ^{1/}		92,839,556		92,839,556
Delta Water Charge		47,012,233	24,992,616 ^{2/}	72,004,849
East Branch Enlargement		5,202,365	30,146,101	35,348,466
Water System Revenue Bond Surcharge			35,073,902	35,073,902
Tehachapi Second Afterbay Facilities			5,001,372	5,001,372
<u>DEVIL CANYON – CASTAIC CONTRACT</u>				
Operations and maintenance – Article 17(b)		6,319,159		6,319,159
Debt service on bonds – Article 17(a)			7,017,340	7,017,340
			TOTAL ^{3/}	\$ 650,724,876

The accompanying report is an integral part of our presentation of the Statement of Charges.

1/ Based on a water delivery schedule of 1,711,500 acre-feet.

2/ Amounts typically reflect Urban Rate Reduction credits in the transportation charge and the Delta Water Charge as stated under Article 51 of the Monterey Amendment. However, the Department will not include these credits in the 2010 Statement of Charges until a study of the amount of credits that could be given is completed.

3/ Metropolitan pays the capital cost component in semi-annual payments and the minimum and variable cost components in monthly payments.

Note: The Department issued a revised 2010 Statement of Charges in December 2009. The amounts above do not reflect this revision. See page 135 for a comparison of these amounts to the December 2010 version.

DISCUSSION OF OUR SERVICES, AUDIT FINDINGS AND GENERAL COMMENTS

In conformity with the contract between The Metropolitan Water District of Southern California (Metropolitan) and Richardson & Company, we have audited the 2010 Statement of Charges submitted to Metropolitan by the State of California Department of Water Resources (Department).

Introduction

Scope of the Assignment. The primary service we perform for Metropolitan is the audit of the annual Statement of Charges under Metropolitan's Water Service Contract with the Department. In addition to our audit work, we perform special projects as requested by Metropolitan's staff in areas such as investigating financial and accounting matters, disputes over Department policy and in negotiating contract amendments and administrative changes in the Department's management of the State Water Project. We also participate with Metropolitan in water contractor meetings that serve as a forum for resolving accounting, billing and budgeting issues, including meetings of the State Water Contractor (SWC) Audit-Finance Committee and progress meetings with Metropolitan staff to discuss audit findings.

Reporting. The more significant findings and results of our audit, special projects work and participation in meetings are presented in two reports prepared after the completion of our annual audit: a comprehensive report that serves as a working document between the auditors, Department and Metropolitan staff and a summary report that is provided to Metropolitan's Board of Directors and management addressing the results of our audit.

Ongoing Audit of the Statement of Charges

Our goal is to provide Metropolitan with a thorough audit. The engagement is divided into forty-one separate areas and fieldwork is completed primarily from April through October. Computer auditing techniques are used to test posting, mathematical accuracy and select samples from data files. The following are unresolved issues and the more significant findings noted in our audit. The changes reflected in the 2010 Statement of Charges are summarized in TABLE A on pages 128 and 129, those projected to be reflected in the 2011 Statement of Charges are summarized in TABLE B on pages 130 through 133 and those that will affect credits, refunds and adjustments are summarized in TABLE C on page 134.

Unresolved Issues Related to the 2010 Statement of Charges:

During our audit, we encountered a number of issues related to the calculation of various components of the 2010 Statement of Charges that need to be addressed by the Department. Some of these issues result in errors in the Statement of Charges. The following paragraphs describe the nature of the issues and the potential effect on Metropolitan's Statement of Charges.

Rebill of the 2010 Statement of Charges. The Department has identified several adjustments to the original 2010 Statement of Charges that are expected to be reflected in a rebill in December 2009. The following are some of the more significant changes: revise the three-year average escalation factors for 2010 and 2011, reflect the permanent capacity transfer from Dudley to Mojave starting in 2010, incorporate future cost estimates for the Delta Fish Agreement, Bay Delta Compliance Plan and the Oroville Settlement Agreement and include rate management credits for 2010.

Reallocation of Recreation Costs. In December of 2005, Metropolitan filed a claim with the State Victim Compensation and Government Claims Board that included, among other things, a contention that the Department has been including, in Metropolitan's bills, charges for the recreation and fish and wildlife enhancement portion of facilities financed with Water System Revenue Bonds. Metropolitan asserted that such charges are not permitted under the SWP Water Supply Contracts or the Davis-Dolwig Act. In evaluating Metropolitan's claim against the Department for this and other unresolved billing issues, the Department's legal counsel determined that Water Code Section 11912 (part of Davis-Dolwig Act) prohibits the Department from including the costs of the development of recreation, or for fish and wildlife, in charges to the water contractors. These costs are the responsibility of the State of California general fund or other available funds.

As a partial solution for funding recreation debt service costs, the Department revised the recreation allocation percentage for certain Delta facilities costs from 14% to 3.3% for minimum and 3.4% for capital beginning in the April 2007 revision of the 2007 Statement of Charges, which shifted additional costs retroactively to Metropolitan and the other contractors. This approach was the outcome of an investigation by the Division of Fiscal Services and the Office of the Chief Counsel, through which the Department determined that the allocation figure of 14% being applied to certain facilities was without factual support because the 14% allocation figure was developed for purposes of the Peripheral Canal only. These costs were then removed from the "Delta Facilities" category and placed in the "California Aqueduct Delta to Dos Amigos" category. The Department believes this change better reflects the purpose of these facilities and their recreation and fish and wildlife enhancement cost structure. The Department contends that, although the Water Supply Contracts contain some specific provisions governing cost allocations, many of the determinations that are to be made are left to the discretion of the Department but that the determination cannot be "arbitrary, capricious or unreasonable." One of the factors identified by the Department that would support such a change is a lack of an appropriate source to pay for non-reimbursable costs. The affect of this reclassification of costs was a cumulative increase to Metropolitan's conservation capital and minimum components by \$7,840,000 and \$5,553,000, respectively, in the 2007 through 2010 Statements of Charges. We will work with Metropolitan and the Department to determine the propriety of this change.

In May of 2008 the Department secured a \$29.6 million loan from the Pooled Money Investment Account (PMIA) to fund the remaining recreation costs. The loan has a term of 364 days and will automatically renew if the Department does not have sufficient available revenue to pay the loan in full. The Department has pledged “available revenues” which means all “surplus revenues” in excess of \$500,000 per year of the amount deposited in the State Water Facilities Capital Account and all amounts remaining, if any, after the Water Contractor rate reduction credits, excluding the amounts described in Article 51(c)(2) of the Water Supply Contracts. The interest rate will be reset every 364 days with an initial rate of 5%. Under the proposed terms of the PMIA loan, the Department is to make quarterly payments totaling \$4.0 million per year. While the Department has historically had sufficient surplus revenues to make the proposed minimum payments, it has historically not had surplus revenue available after rate reductions to make additional payments. If the Department is able to only make the minimum payments, the loan will be repaid in full by October 2017.

The Department developed a new bond resolution that excludes capital costs that have been allocated to recreation. These recreation capital costs will instead be funded from the Capital Facilities Account and reimbursements from the General Fund. However, the Department projects that this account will be in a deficit position by 2011. We will continue to monitor the progress of this issue and the impact of decisions made on the Statement of Charges.

Accounting System Upgrade. Effective July 1, 2006, the Department converted from the SAP Legacy system to SAP Next Wave in order to upgrade to a more updated computerized accounting system. As part of this upgrade, the Department established a separate SAP system, called UCABS, which is a new system to track costs for contractor billing purposes. UCABS then interfaces with the existing Cost Allocation and Repayment (CARA) system maintained by SWPAO. The Department determined while preparing the 2008 Statement of Charges that UCABS was not accurately allocating costs to the CARA system. As UCABS was not functioning properly at the time the 2008 Statement of Charges was prepared, SWPAO computed certain components outside of the CARA system. The calculations were also done outside of the system for the 2009 and 2010 Statements of Charges. For instance, the Department utilized the 2006 variable energy costs from their 12-table study that is typically used for energy billing projections because the information in UCABS was determined to be inaccurate. The Delta Water Charge calculation was also prepared outside of the CARA system. We will continue to monitor this situation to determine that the system is fully functional for the 2011 Statement of Charges.

In the 2009 Statement of Charges we also noted a change in the method of including fish replacement charges in the contractors’ variable component. In the past, the Department calculated a fish replacement charge by multiplying the calculated unit rate by the water through Banks Pumping Plant, resulting in a charge that was added to the Banks Pumping Plant costs, and was reflected in B-3, prior to calculating the B-17 variable unit rates. However, in the 2009 and 2010 Statements of Charges, the Department added

the fish replacement unit rate directly to the B-17 variable unit rates, which we believe does not leave an adequate trail for the calculation of the B-17 rates using costs in B-3. We will recommend that the fish replacement charge be added to other variable energy costs assigned to the plant, as it has been done in the past.

Debt Service Reserve and Surplus Money Investment Fund (SMIF) Interest. The Department is required by bond covenants to maintain bond debt service reserves. The reserve amount is recomputed with each new series issued. Until 1995, the Department maintained separate accounts for each bond series, which included the reserve, as well as receipts from contractors, SMIF interest and payments of debt service. In 1995, the Department consolidated the accounting for the bonds, combining the reserves into one account. Off-aqueduct reserves were consolidated with other reserves even though the off-aqueduct reserves were collected from the contractors directly, based on water deliveries, while other reserves were funded by bond proceeds. Since 1995, the SMIF interest earned on the debt service reserve balance has been returned to the contractors semi-annually in proportion to the contractors' payments of the off-aqueduct, East Branch Enlargement and WSRB charges.

In 2001, the Department analyzed the current debt service reserve balance of \$180,954,755 (through Series AA) and determined that \$56,595,746 of this balance was collected from the contractors in 1983, 1984 and 1985 based on water deliveries in those years to fund reserves required for off-aqueduct bonds. The remaining balance of \$124,359,009 was provided through bond proceeds to fund the reserves required by subsequent bond issues. Recently, the Department has determined that due to the repayment of a portion of the off-aqueduct bonds, the current outstanding off-aqueduct bonds require a reserve of only \$29,774,507. The remaining amount collected from the contractors of \$26,821,239 is being maintained in the reserve account to meet the reserve requirements for various Water System Revenue Bonds.

The Department does not appear to have addressed the issue of the off-aqueduct reserves funding the debt service reserves for these other bond issues. The portion of the debt service reserve held in excess of the amount required for the off-aqueduct bonds of \$26,821,239 would need to be funded from some other source should it be determined that this amount should be returned to the contractors. We have provided documents to Department personnel assigned to this issue that will be responsible for evaluating this issue.

The Department returned \$18,192,000 of excess debt service reserves attributable to Series A, B, D, K, L and P, and \$28,821,000 of accumulated interest earnings related to a U.S. Treasury strip investment. We were unable to obtain a response from the Department about whether this refund relates to the \$26,821,239 excess debt service reserve calculated by the Department in their 2001 study, as described above. It appears that in determining the excess debt service reserve to be returned, the Department did not consider separately the portion of the reserve collected through the off-aqueduct component in 1983,

1984 and 1985. Although we noted that \$308,000 of the excess reserve returned related to the Bottle Rock and South Geysers off-aqueduct facilities, we were unable to determine whether any other portion of this excess had originated from off-aqueduct bonds that were subsequently refunded by Water System Revenue Bonds.

In documents prepared as part of the debt service reserve study in 2001, we noted that Metropolitan paid approximately 66.3% of the off-aqueduct reserve collected in 1983, 1984 and 1985. We noted that Metropolitan's portion of the excess debt service reserve refund discussed in the previous paragraph was 66.6%, so even if most of the \$18,912,000 of the excess debt service reserves that were returned originated from off-aqueduct debt service reserves, then Metropolitan's share of the refund appears reasonable. We will continue to follow up on this issue to ensure that Metropolitan was properly refunded the appropriate share of any excess debt service reserve amounts.

Springing Amendment. On April 1, 2002, the Department adopted Resolution No. DWR-WS-48 and Resolution No. DWR-WS-49 (Supplemental Resolutions), which amend provisions of the General Bond Resolution relating to the Debt Service Reserve Account. The Supplemental Resolutions change the Reserve Account Requirement and provide that if the balance in the Debt Service Reserve Account exceeds the Reserve Account Requirement, any excess funds may be transferred to any legally permissible fund or account designated by the Department, and permit the substitution of a Reserve Fund Instrument for cash in the Debt Service Reserve Account.

As a result of the adoption of the Supplemental Resolutions, the Department is in the process of determining the amount of the debt service reserve available for refunding, the allocation of the excess to project and the allocation from project to contractor. Initial analysis by the Department's Fiscal Services Office indicated that the total amount to be refunded to contractors is \$72.1 million. The Department and contractors have agreed that refunds of excess debt service reserve will offset Delta Habitat Conservation and Conveyance Program (DHCCP) charges for 2008 and 2009. Currently, SWPAO is determining the allocation to project and the allocation to contractor and issued a second revision to the 2008 Statement of Charges refunding \$3.4 million of the debt service reserve and \$2.4 million of Series AE capitalized interest. The \$3.4 million released is to offset 2008 DHCCP costs that were added to the revised 2008 Statement of Charges. In addition, the Department issued a revised 2009 Statement of Changes refunding \$30 million of the debt service reserve. Metropolitan received refunds of \$2.7 and \$18.7 in the 2008 and 2009, respectively. However, the Department and contractors have determined that these recent refunds do not distribute the reserve equitably among contractors. Currently, SWPAO is preparing a revised allocation methodology for the final return of the excess debt service reserves totaling approximately \$64.6 million. We will follow up on the status of the return of debt service reserves in our audit of the 2011 Statement of Charges.

Variable Component Billings. Since the implementation of SAP, the Department has had difficulty calculating the water table redistribution entries that reallocate costs between the minimum, variable and Delta Water Charge components for water gains and losses and changes in reservoir storage within the SAP system. To properly reflect these water table redistribution entries, the Department has had to perform the calculation outside of the system and post entries manually in SAP for the preparation of the Statements of Charges. During 2004, the Department modified the SAP system to calculate the downstream entries; however, the system was not used until the 2008 Statement of Charges. For the 2008, 2009 and 2010 Statements of Charges, the Department calculated the downstream allocation of costs within the SAP system; however, as described in the VARIABLE AND MINIMUM ENERGY CHARGES section of this report, the SAP system was not used to bill the variable component, so these downstream reallocations were not reflected in the Statement of Charges for the variable charges. We were able to recalculate the Department's downstream allocation, except that the Department did not record the affect of the calculation in time to be included in the 2010 Statement of Charges. The impact of this error is described beginning on page 50 of this report.

We noted, as in the prior year, that the power costs included in Bulletin 132-09 Table B-3, which should summarize all power costs before the reallocation for water gains and losses and storage changes, appears to include only costs of water supply deliveries, after the reallocation for water gains and losses and storage changes for some years. We also noted that the costs in B-3 do not support the variable unit rates calculated in B-17, as it states in the introductory section of Bulletin 132-09. The B-17 rates, which are used to determine the calculated components of the variable charges, for 2007 to 2010 are calculated by dividing the energy costs in Table B-12 by the water supply deliveries in Table B-6. However, our audit of the energy cost and sales data for these years included on Table 2 of the 12-Table energy study, prepared by the Department for estimating future net power charges, support the variable costs in Table B-3. Although 2006, 2007 and 2008 would have typically been billed using actual costs from the accounting system, the Department is still calculating these charges based on Table 2 of the energy study. We compared the costs included in B-3, which are supported by Table 2 of the energy study, to the Plant costs on Table B-12, which were used to calculate the unit rates, and noted that the amounts in B-3 were higher for 2006, 2009 and 2010, by \$11,583,000, \$10,775,000 and \$9,415,000, respectively, and lower for 2007 and 2008 by \$821,000 and \$7,862,000, respectively. The difference between B-3 and B-12 costs, according to the introductory section of the B Tables, is the affect of the downstream allocation of costs for recreation, gains and losses in storage evaporation and seepage. Because the differences are significant and the differences do not agree to the amounts noted in our testing of the Department's downstream process, we do not believe that this is the entire cause of the difference.

As a result of the inconsistencies between B-3 and B-12 discussed in the previous paragraph, we calculated unit rates using the B-3 costs supported by the energy study to determine the affect to Metropolitan's variable charges of using B-12 costs to calculate the unit rates instead of using B-3 costs.

We noted that Metropolitan's variable calculated component would be higher by \$9,118,000, \$3,071,000, \$7,190,000 and \$6,254,000 for 2006, 2007, 2009 and 2010 and lower for 2008 by \$7,800,000 in the 2010 Statement of Charges had B-3 costs been used to calculate the unit rates. These amounts do not take into consideration the effects of the downstream reallocation of costs between variable and minimum for these years. We discussed these issues with the Department and they indicated that they are working to present the B Tables as described in Bulletin 132. We will work with the Department to determine the cause of these differences.

Delta Fish Agreement Amendment Four. An agreement was signed between the Department and the Department of Fish and Game (DFG) on December 30, 1986 to provide payments to offset fish losses caused by operations in the Delta. The Department believes this Delta Fish Agreement (Agreement) was necessary to enable them to add four additional pumps to the Banks Pumping Plant without further resistance from the DFG. Under terms of the original Agreement, the Department was required to expend \$15,000,000 for fishery improvement projects to mitigate past fish losses by December 29, 1995. The 1986 Agreement was amended to extend the period through which the Department can expend the remainder of the \$15 million to December 31, 2007. The Department is currently negotiating to amend the 1986 Agreement for a fourth time; however, the contractors have informed the Department that they are unable to support the proposed amendment and will oppose efforts by the Department to fund the activities described in the amendment. In the Delta Water Charge component of the 2009 Statement of Charges, the Department included \$20 million each year from 2009 to 2018 to pay for new projects and expenditures related to mitigation for species not included in the original amendment and for the acquisition of mitigation lands as described in the proposed amendment, but the amounts were removed in the rebill of the 2009 rebill. No amounts have been included in the 2010 Statement of Charges, except for mitigation land purchases totaling \$4.2 million.

Water System Revenue Bond (WSRB) Surcharge. In conjunction with the development of the new SAP/CARA computerized accounting system in 2000, the Department developed a new calculation of the WSRB Surcharge using the SAP/CARA system. However, this new system produces a Surcharge that is significantly different from the estimated Surcharge amounts calculated as part of the 2000 Statement of Charges. As a result, since the implementation of SAP, the Department has billed the contractors the estimated WSRB Surcharge amounts that were included in the 2000 Statement of Charges, Attachment 3, which was calculated in 1999. The Department has not been able to determine why the SAP/CARA system produces a Surcharge that is inconsistent and unreasonable compared to previous computations. As a result, in the 2003 through 2010 Statements of Charges, the Department calculated the WSRB Surcharge using the relative proportion of the Surcharge to total debt service from the 2002 Statement of Charges and applied that proportion to 2010 debt service costs that include WSR bonds through Series AF issued in June 2009. We will continue to monitor the Department's progress in developing the computation within SAP.

East Branch Enlargement. During April 1986, Metropolitan and the Department entered into Amendment No. 19, known as the East Branch Enlargement Amendment, to the basic Water Service Contract which established the basis for repayment of the costs of enlarging the East Branch of the California Aqueduct. The Enlargement work was in addition to the Mojave Division modification to correct the basic capacity deficiency. Where practical, modification and Enlargement work were being done at the same time to take advantage of economies of scale. However, the modification costs are recovered through the transportation capital component and the Enlargement costs are recovered through the East Branch Enlargement component.

The methodology used by the Department to allocate costs to the Enlargement and the modification is still considered an interim or temporary approach that has not been officially accepted by the contractors. Higher priority projects have delayed the finalization of the allocation. We provided the Department with a description of East Branch Enlargement and excess capacity incremental cost allocation issues in 1991. The Department has indicated that consideration will be given to Metropolitan's concerns while developing the revised East Branch Enlargement allocation methodology. A memo has been developed that lays the groundwork for performing the detailed allocation computations for the final allocation methodology and was distributed to the water contractors for review and discussion in October 1994. Due to the complexity of the East Branch Enlargement and the large costs involved, we believe that joint participation in the allocation methodology is necessary in order to assure that the final allocation methodology is fair and equitable to all parties involved. The Department had planned to present its allocation methodology to all East Branch contractors. The discussion and implementation of the new methodology has been deferred due to higher priority projects.

Although the Department has not finalized its allocation of East Branch Enlargement costs, adjustments were made to permanently remove East Branch Enlargement capital costs incurred through 1999 from the cost accounting system to prevent the double billing of these costs in the Enlargement component and the transportation capital component. However, the adjustments were based on estimated costs rather than costs in the accounting system, resulting in \$9,716,000 of historical capital costs that were not removed from the computation of the 2010 Statement of Charges, which understates the costs allocated to Enlargement and overstates the transportation capital component. If the amounts in the accounting system were to be used to prepare the entries to permanently remove East Branch Enlargement capital costs from the contractors' billings, Metropolitan's transportation capital component could decrease by \$871,000. The Department is aware of the fact that the costs used in the allocation process were outdated and need to be revised, but have not had the time to make the revisions. We will continue to monitor these differences to ensure adjustments are made in conjunction with the finalization of the East Branch Enlargement allocation methodology.

The original plan for the Mojave Siphon Powerplant was to use the existing barrel and build a second siphon consisting of three new pipelines to handle the additional flows due to the Enlargement, in which case the second siphon would be allocated 100% to Enlargement. However, the plan was revised such that all water would flow through the second siphon to the Powerplant and that the first siphon would be abandoned. Thus, the costs of the second siphon and the intake should be allocated between Enlargement and transportation capital; however, the Department has continued to allocate these costs as 100% Enlargement. As a result, the total capital costs allocated to Enlargement for Metropolitan, from 1988 to 2024, are overstated by approximately \$10,860,000, and capital costs allocated to transportation capital are understated by approximately \$11,655,000 through 2035. The effect on Metropolitan's 2010 Statement of Charges is to overstate the Enlargement component by \$624,000 and to understate the transportation capital component by \$670,000. We believe this error will be corrected in conjunction with the finalization of the East Branch allocation methodology.

The Department has arrived at a methodology for allocating some of the minimum costs that were previously billed under the transportation minimum component to the East Branch minimum component to comply with the Amendment. We reviewed the allocation methodology noting that in past years the preliminary allocation factors were applied to minimum costs beginning in 1995. There appears to be some inconsistency in the activation dates utilized to allocate O&M costs to the East Branch component. In addition, the allocation factors used by the Department are considered interim allocation factors. The Department's allocation memo describes an alternative procedure for determining the proportionate minimum OMP&R costs; however, these procedures have not yet been implemented. We will continue to monitor this situation until a final allocation methodology has been agreed upon and will work with Metropolitan staff to evaluate this proposed allocation methodology and the activation dates.

Findings Resulting in Changes to the 2010 Statement of Charges:

- MWQI costs for 1999 through 2004, included twice in the billing system in the prior year, have been corrected, resulting in a decrease to Metropolitan's transportation minimum charge of \$5,853,000 in the 2010 Statement of Charges. (TABLE A, Item 1)
- Our prior year audit disclosed discrepancies in the Department's calculation of the water table redistribution entries that appeared to be attributable to the Department not using the most current summary of annual water quantities conveyed through each pumping and power recovery plant. In our current year audit, we verified that the water delivery and reservoir storage changes used to calculate the downstream reallocation of costs were properly updated. The impact of this correction on Metropolitan's 2010 Statement of Charges was to reduce the minimum component by \$5,256,000 and increase the Delta Water Charge by \$540,000, respectively, in the 2010 Statement of Charges. (TABLE A, Item 2)

- When compiling the 2008 and 2009 estimates for technology improvement projects, the Department included certain estimates in the 2009 Statement of Charges twice. This error was corrected in the rebill of the 2009 Statement of Charges, resulting in a decrease in Metropolitan's Delta Water Charge and transportation minimum component by \$123,000 and \$3,438,000, respectively. (TABLE A, Item 3)
- Special engineering cost estimates for 2008 through 2013, overstated by \$63,928,000 in the calculation of the 2009 Statement of Charges, were reduced in the 2010 Statement of Charges, resulting in a decrease in the Delta Water Charge capital and transportation capital components by \$454,000 and \$789,000, respectively. (TABLE A, Item 4)
- In our prior year audit, we reported that the Department included the Coastal Branch Extension 2009 debt service amount of \$2,935,000 instead of the Coastal Branch power charges of \$1,781,000. This error was corrected, resulting in a reduction to Metropolitan's transportation variable charge of \$923,000 in the 2010 Statement of Charges. (TABLE A, Item 5)
- The Tehachapi Second Afterbay charge for debt service allocated to the power benefit included in the 2009 variable charges was overstated by \$1,038,000 in the 2009 Statement of Charges. The 2009 estimate was revised to agree to the debt service schedule in the 2010 Statement of Charges, resulting in a decrease in Metropolitan's transportation variable component of \$830,000. (TABLE A, Item 6).
- In our prior year audit, we reported invoices totaling \$2,376,000 for 2004 and 2007 wheeling transactions were billed but were not collected and hence not credited to the contractors. These invoices have now been credited to the cost accounting system, resulting in a decrease of \$86,000 and \$376,000, respectively, to Metropolitan's transportation capital and minimum components in the 2010 Statement of Charges. (TABLE A, Item 7)
- The Department incurred \$3.4 million of costs in 2005, 2006, and 2007 for recreation and fish and wildlife projects at Perris Reservoir. These expenditures were to facilitate easy access for park users to the water for recreation, and maintain and enhance wildlife habitat due to the reservoir level being lowered to address public safety concerns related to the stability of Perris Dam in the event of a major earthquake. These costs were being allocated mostly to the water supply Project purpose rather than 100% to the recreation Project purpose. As the expenditures have no apparent transportation water supply purpose, the Department made a correction to reallocate \$2.1 million of these costs to a recreation cost center, with the exception of the costs related to the irrigation system, which Metropolitan concurs should be billed to the contractors under the transportation capital component. As a result of this correction, Metropolitan's

transportation capital component decreased by \$125,000 in the 2010 Statement of Charges. (TABLE A, Item 8)

- Our prior year audit disclosed that the Department calculated the 2008 and 2009 recovery generation credits for Alamo and Mojave Siphon using incorrect mill rates, understating the value of recovery generation for 2008 by \$4,999,000 and understating the value of recovery generation for 2009 by \$1,641,000. These errors were corrected when the Preliminary Power Allocation Memo for 2008 was issued and the 2009 estimates were revised for the 2010 Statement of Charges. As a result, Metropolitan's transportation variable component decreased by \$535,000, the transportation minimum component increased by \$477,000 and the Delta Water Charge minimum component increased by \$4,000 in the 2010 Statement of Charges. (TABLE A, Item 9)
- The Department has recorded credits in the cost accounting system for payments received from the USBR in 2006 totaling \$166,000 for San Luis capital costs. Because the contractors are charged initially for 100% of the costs until reimbursement is received from the USBR, Metropolitan's transportation capital and Delta Water Charge capital components are now properly reduced by \$5,000 and \$2,000, respectively, in the 2010 Statement of Charges as a result of these credits being recorded. (TABLE A, Item 10)
- Oroville power revenues in the Delta Water Rate calculation for 2035, overstated in the prior year as a result on an input error, were reduced by \$4,960,000. As a result, Metropolitan's 2010 Delta Water Charge increased \$44,000 in the 2010 Statement of Charges. (TABLE A, Item 11)
- A portion of the MWQI costs are billed by the Department and a portion are billed by the State Water Contractors Association (SWCA). A SWCA consultant has determined that the Department incorrectly allocated these costs between the annual Statement of Charges and the SWCA in the 2009 Statement of Charges. The Department has prepared a revised allocation and, as a result, Metropolitan's transportation minimum component increased by \$73,000 in the 2010 Statement of Charges. (TABLE A, Item 12)
- Although differences remain between actual Hyatt-Thermalito O&M costs for 2004 through 2007 and FERC relicensing costs for 1999 compared to the credits included in the Delta Water Rate calculation for these years, adjustments have been made by the Department to update amounts to reflect actual costs. In addition, the credits for the FERC relicensing costs for 2000 through 2007 have been updated to actual. The correction of the credits included in the Delta Water Rate calculation result in an increase of \$284,000 in Metropolitan's Delta Water Charge in the 2010 Statement of Charges. (TABLE A, Item 13)

Findings Projected to Result in Changes to the 2011 Statement of Charges:

New Findings

- Metropolitan's 2008 variable calculated component is overstated by \$4,242,000 in the 2010 Statement of Charges due to the use of incorrect unit rates in calculating this charge. (TABLE B, Item 1)
- Monterey Amendment Litigation charges totaling \$8.4 million, which have been included in the contractor's transportation minimum component charges on Attachment 4B of the Statement of Charges, were also allocated through the cost allocation process, resulting in these costs being billed twice. This error results in an overstatement to Metropolitan's transportation minimum component and Delta Water Charge of \$3,589,000 and \$97,000, respectively, in the 2010 Statement of Charges. (TABLE B, Item 2)
- We noted that the Department had included approximately \$6.1 million of Hyatt Unit 1, 3, and 5 refurbishment costs in the computation of the Delta Water Charge; however, the Department did not include a credit to offset these charges, resulting in the double billing of these costs, since they are now being billed through the variable component. The exclusion of the credit results in an overstatement to Metropolitan's Delta Water Charge by \$257,000 in the 2010 Statement of Charge. (TABLE B, Item 3)
- Bay Delta Conservation Plan costs are billed as a separate component of the transportation minimum charge in the Statements of Charges. The Department must include a credit in the Delta Water Rate calculation in order not to double bill the contractors. Our audit procedures disclosed that the Department erroneously excluded the credits for 2007, 2008 and 2009, overstating costs included in the Delta Water Charge by approximately \$7,500,000 and overstating Metropolitan's Delta Water Charge by \$242,000 in the 2010 Statement of Charges. (TABLE B, Item 4)
- In 2008, Kern County Water Agency (KCWA) exchanged 10,033 acre-feet of entitlement water for the same amount of 1990 Demonstration water held in the Kern Water Bank (KWB). The Department billed KCWA for this water as if delivered from the Delta. Since all contractors were charged when the KWB was filled, 2008 system power costs should be reduced for the amount paid by KCWA from Banks to reach 10A. This credit was not included in the Department's computation of the variable charges, which results in an overstatement of \$138,000 to Metropolitan's 2008 variable component in the 2010 Statement of Charges. (TABLE B, Item 5)
- The 2010 Statement of Charges includes scheduled debt service costs for Hyatt Units 2, 4, and 6 of \$1,259,000 for 2009 and \$1,304,000 for 2010 through 2029 as a result of the issuance of Series

AE WSRB in 2008. The debt service schedule used in the 2010 Statement Charges is based on total costs for Units 2, 4, and 6 of \$16.9 million. However, we determined the total costs in SAP were \$18.6 million. Since the credit is included in the Delta Water Charge based on the \$16.9 million instead of the \$18.6 million, Metropolitan's 2010 Delta Water Charge is overstated by \$56,000. (TABLE B, Item 6)

- The present value of water used to calculate the Delta Water Rate was based on prior year water data. The use of the outdated entitlement water results in a \$150,000 overbilling to Metropolitan's Delta Water Charge in the 2010 Statement of Charges. (TABLE B, Item 7)
- Our audit disclosed that costs incurred in prior years that were previously suspended were assessed to the contractors in 2009, including \$41,000 in charges for a 2007 4th of July event at Lake Oroville. This error results in an overstatement of \$1,000 to Metropolitan's Delta Water Charge in the 2010 Statement of Charges. (TABLE B, Item 8)
- ◆ The Department incurred \$2.0 million in litigation settlement costs related to a condemnation lawsuit involving the San Luis Canal and Arroyo Pasajero Flood Control Improvement Project. Costs incurred at San Luis have a joint Project purpose split, resulting in 55% of the costs being billed to the contractors, with the remaining 45% being billed to the United States Bureau of Reclamation. However, we noted that the contractors were allocated only 51% of the settlement cost instead of the 55%, as a result of the Department allocating costs manually rather than allocating the cost through the SAP cost allocation system. This allocation error understates Metropolitan's capital component in the 2010 and future Statement of Charges by \$2,000 per year. (TABLE B, Item 9)
- The Department calculated the 2010 recovery generation credits for Alamo and Mojave Siphon using incorrect mill rates, understating the value of recovery generation for 2010 by \$1,072,000. As a result, Metropolitan's transportation variable component is overstated by \$15,000 and the transportation minimum component is understated by \$17,000 in the 2010 Statement of Charges. (TABLE B, Item 10)
- The Federal government previously paid for flood control costs at Oroville, but no longer did so beginning in 1986. To include these costs in the contractor billings, the Department must prepare entries to allocate Oroville flood control costs to the contractors each year. Our audit of the 2010 Statement of Charges disclosed that the Department did not make this entry before the 2010 Statement of Charges was issued. As a result, Oroville flood control costs totaling \$201,000 were excluded from the 2010 Statement of Charges, understating Metropolitan's Delta Water Charge by \$7,000. (TABLE B, Item 11)

- Although the Department prepared a 2010 fish replacement charge calculation, the unit rate calculated for the 2009 Statement of Charges was used for 2010. Because the 2009 rate was used instead of the 2010 rate, Metropolitan's 2010 variable charge is understated by \$87,000. (TABLE B, Item 12)
- Although the Department calculated the downstream distribution to reallocate costs between the minimum and variable components for water gains and losses and changes in reservoir storage in SAP, entries to record the effect of the downstream calculation were not made to SAP in time to be included in the 2010 Statement of Charges. As a result, the transportation minimum costs for 2006 through 2008 are understated by \$2,256,000 and the conservation minimum costs are understated by \$23,000. The impact of this error on Metropolitan's 2010 Statement of Charges is to understate the transportation minimum component by \$1,754,000 and understate the Delta Water Charge by \$1,000. (TABLE B, Item 13)
- During our testing, we determined that the program developed by the Department to compute the downstream distribution using the SAP system excluded initial fill water, operation losses, and net annual storage changes associated with the San Luis Reservoir and the portion of the California Aqueduct that is allocated to conservation. This change in methodology of excluding conservation water delivered through Banks Pumping Plant from the downstream calculation for 1999 to 2008 understates the variable and transportation minimum costs by \$3,672,000 and \$3,413,000, respectively, and overstates the conservation minimum costs by \$6,964,000. The impact of this error on Metropolitan's 2010 Statement of Charges is to understate the variable component by \$2,938,000, understate the transportation minimum component by \$1,486,000 and overstate the Delta Water Charge by \$236,000. (TABLE B, Item 14)

Previously Reported Findings

- Although the Department is now utilizing the SAP system to calculate the downstream distribution that reallocates costs between the minimum and variable components for water gains and losses and changes in reservoir storage, because the Department billed the variable component outside of the SAP system in the 2010 Statement of Charges for the years 2006, 2007 and 2008, the entries to record the downstream distribution of costs calculated by SAP were not included in the contractors' variable charges, as they were for the minimum component, resulting in an overstatement of Metropolitan's variable component by \$18,745,000. (TABLE B, Item 15)
- The Department included \$13,374,000 of estimated and actual costs for Gorman Creek Improvement Channel emergency repairs in the 2010 Statement of Charges. The Department considers the inclusion of these costs in the transportation minimum component proper because they believe that the repair work is to bring the facility back to normal conditions and is not a

betterment. However, these repairs appear to meet the qualifications for capitalization under the Department's capitalization policy. The inclusion of these costs in the transportation minimum component overstates Metropolitan's transportation minimum component by \$12,049,000 and understates the transportation capital component by \$773,000 in the 2010 Statement of Charges. (TABLE B, Item 16)

- As in the past two years, our review of the variable energy charges and discussion with Department personnel disclosed that the variable energy charges were not calculated using the power costs and power sales from the SAP accounting system. Net power costs summarized on Table 10 of the 12-Table study were used for calculating the 2006, 2007 and 2008 variable charges. We compared this summary of power costs used in the calculation of the Statement of Charges to the amounts in SAP, adjusted for known misspostings, and estimate that the 2006, 2007 and 2008 variable charges are overstated by \$324,000, \$6,245,000 and \$4,012,000, respectively, in the 2010 Statement of Charges, resulting in an overstatement of \$8,465,000 to Metropolitan's transportation variable component. (TABLE B, Item 17)
- The 1998, 1999, 2000 and 2004 to 2008 Hyatt-Thermalito O&M costs included in the variable component are overstated by \$6,536,000 and the credits included in the computation of the Delta Water Charge are understated by \$219,000 due to the Department not using actual O&M costs. The effect of these errors was to overstate Metropolitan's transportation variable and minimum components by \$5,854,000 and \$87,000, respectively, and to understate Metropolitan's Delta Water Charge by \$107,000 in the 2010 Statement of Charges. (TABLE B, Item 18)
- Costs totaling \$4,112,000 for Delta-related projects were allocated statewide instead of to the Delta reaches. The incorrect allocation of these costs results in a \$150,000 understatement of Metropolitan's Delta Water Charge and a \$2,673,000 overstatement to Metropolitan's transportation minimum component in the 2010 Statement of Charges. (TABLE B, Item 19)
- We examined the Department's calculation to allocate historical and estimated plant replacement costs to contractors based on water deliveries and noted that the Department's calculation does not reflect the most current historical cost information. Replacement costs used to calculate the variable replacement charges are overstated by \$471,000 for 2005 and 2006. In addition, we noted that incorrect replacement costs for 2007 and 2008 were used in the Statement of Charges. Also, for 2009 and 2010, cost estimates for the Banks Pumping Plant were incorrectly allocated based on the water at the Buena Vista Pumping Plant, resulting on an overstatement of costs of \$1,120,000. These errors result in a \$1,429,000 overstatement of Metropolitan's replacement charges on Attachment 5 and the transportation variable component in the 2010 Statement of Charges. (TABLE B, Item 20)

- Thermalito Diversion Dam capital credits appear to be included in the variable charges twice for 2009 and 2010. The result is to overstate variable costs for 2009 and 2010 by \$1,531,000, which overstates Metropolitan's variable component by \$1,225,000 in the 2010 Statement of Charges. (TABLE B, Item 21)
- Metropolitan's 2006 variable payment included in Attachment 4C of the 2010 Statement of Charges did not include payments totaling \$940,000. In addition, the payments for 2007 and 2008 are understated by \$5,000 and \$64,000, respectively. These errors overstate Metropolitan's transportation variable charges by \$1,195,000, including interest on the underpayment, in the 2010 Statement of Charges. (TABLE B, Item 22)
- The Department calculated a peaking charge for 1998 of \$351,000 and for 1999 of \$1,533,000, but the Department had not reduced the system power costs by these amounts. If these peaking charges were included in the calculation of the variable charge, Metropolitan's transportation variable and minimum components would be reduced by \$967,000 and \$113,000, respectively. (TABLE B, Item 23)
- We noted a discrepancy of \$1,153,000 for 2008 variable charges because the Coastal Branch debt service amount was used instead of the Coastal Branch power charge. As a result, Metropolitan's variable component in the 2009 Statement of Charges was overstated by \$923,000. (TABLE B, Item 24)
- During our reconciliation of the final 1998 energy, transmission and station service costs, we noted that power costs are overstated by \$2,659,000, power sales are understated by \$501,000, transmission costs are understated by \$293,000, station service costs are overstated by \$95,000 and Coastal Branch power costs are understated by \$680,000 due to the use of outdated information. These errors resulted in an overstatement of Metropolitan's variable component by \$1,048,000 and an understatement of the minimum component by \$142,000 in the 2010 Statement of Charges. (TABLE B, Item 25)
- FERC relicensing costs for 1999 through 2008 were overstated by \$99,000 in the computation of the variable component and 1999 and 2008 costs were understated by \$322,000 in the Delta Water Rate calculation due to the use of outdated costs. As a result, Metropolitan's variable charge is overstated by \$611,000, and the Delta Water Charge is understated by \$16,000 in the 2010 Statement of Charges. (TABLE B, Item 26)
- Upon conversion to a new system in 1999, the Department revised the allocation of certain conservation costs from 1999 to 2002, including Bay-Delta environmental protection studies, compliance monitoring, environmental protection support, planning model development, Delta

facilities planning and Bay-Delta proceedings, such that they were allocated on a statewide basis and billed to the contractors mostly through the transportation minimum component; whereas in the previous system, these costs were being allocated to a Delta facilities reach and were billed to the contractors through the Delta Water Charge, after the allocation to the recreation Project purpose. As a result of this change, \$89,531,000 of minimum costs and \$3,368,000 of capital costs from 1999 through 2008 are being allocated entirely to the contractors, instead of a portion being allocated to the recreation Project purpose, which results in the overstatement of Metropolitan's 2010 and future Delta Water Charge by \$115,000 each year and the overstatement of the 2001 through 2010 Statements of Charges by \$368,000. (TABLE B, Item 27)

- We noted in a previous audit that LADWP paid \$587,000 to the Department in 2005 for interruption and curtailment of capacity as well as for peaking capacity foregone by the Department at the Castaic Powerplant that was not properly recorded in the accounting system. This credit has been properly recorded in the accounting system; however, because the Department did not use SAP to bill the variable charges, the 2010 Statement of Charges does not reflect this correction, resulting in an overstatement of \$470,000 to Metropolitan's variable component. (TABLE B, Item 28)
- Water wheeling transactions for 2004 with an estimated cost of \$230,000 have not yet been collected and credited to the contractors. In addition, an invoice for a wheeling transaction in 2008 totaling \$30,000 that has been billed and collected was not credited to the accounting system. The estimated impact of these unrecorded transactions on Metropolitan's 2010 Statement of Charges is an overstatement of \$110,000. (TABLE B, Item 29)
- In previous audits, we reported that the Department had recalculated the rate management credits for 1997 through 2004 because they had incorrectly used a Table B-15 that had been adjusted for the changes related to the permanent transfer of entitlement water. This recalculation improperly excluded \$79,000 from the 2005 rate reduction credit due to an error in the Department's reallocation computation. (TABLE B, Item 30)
- Metropolitan's 2007 variable calculated component erroneously treated the delivery of 5,000 acre-feet of water taken from storage in the San Joaquin Valley as if the water had been delivered from the Delta through the Banks Pumping Plant. This error overstates Metropolitan's 2007 calculated component by \$73,000 in the 2010 Statement of Charges. (TABLE B, Item 31)
- The credit for Hyatt-Thermalito included in the Delta Water Rate computation was \$855,000 less than the charges in the variable component for 2009 and was \$766,000 less for 2010. These misstatements result in an overstatement of Metropolitan's Delta Water Charge by \$51,000 in the 2010 Statement of Charges. (TABLE B, Item 32)

- The 2007 recovery generation amounts for Warne and Castaic are understated and the amounts for Alamo, Mojave Siphon and Devil Canyon are overstated in the variable component calculations due to the use of outdated amounts. As a result, Metropolitan's transportation variable component was understated by \$34,000 and the transportation minimum component is overstated by \$69,000 in the 2010 Statement of Charges. (TABLE B, Item 33)
- The value of recovery generation for the San Luis and Warne Powerplants for 1998 is understated by \$457,000 and \$14,000, respectively, and the Devil Canyon recovery generation is overstated by \$75,000, due to the use of outdated information. The effect to Metropolitan is to overstate the transportation variable and understate the transportation minimum components by \$28,000 and \$6,000, respectively, in the 2010 Statement of Charges. (TABLE B, Item 34)
- The Department incurred \$3,400,000 of costs in 2005 through 2007 for recreation and fish and wildlife projects at Perris Reservoir that were being allocated mostly to the water supply Project purpose, rather than 100% to the recreation Project purpose. As these expenditures had no apparent transportation water supply purpose, the Department made a correction to reallocate \$2.1 million of these costs from a transportation cost center to a recreation cost center. However, after making these corrections, we noted an additional \$325,000 of recreation-related capital costs continue to be allocated to the contractors, resulting in the overstatement of Metropolitan's calculated capital component in the 2010 Statement of Charges by \$19,000 per year. (TABLE B, Item 35)
- Due to the incorrect coding of cost centers, actual replacement costs totaling \$167,000 for the Gianelli Pumping and Generating Plant have been improperly included in the 2010 Delta Water Charge, instead of being paid from the conservation replacement fund, which results in the overstatement of Metropolitan's 2010 Delta Water Charge by \$8,000. (TABLE B, Item 36)
- The Department used an outdated mill rate when valuing the recovery generation at the Alamo Powerplant, resulting in the value of recovery generation for the Alamo Powerplant for 2002 being overstated by \$97,000. In addition, we noted that the value of recovery generation credit for the San Luis Powerplant for 1999 was understated by \$170,000. The effect to Metropolitan of these errors was an overstatement of the transportation variable component of \$7,000 in the 2010 Statement of Charges. (TABLE B, Item 37)
- Although the Department prepared a 2009 fish replacement charge calculation, the unit rate calculated for the re-bill of the 2008 Statement of Charges was used in the 2009 Statement of Charges. Because the charge calculated using the unit rate from the 2009 rebill is lower than the revised 2009 charge calculated from the fish replacement charge calculation, Metropolitan's 2009

variable charge is understated by \$18,000 in the 2010 Statement of Charges. (TABLE B, Item 38)

- Power costs totaling \$14,848,000 and sales totaling \$2,676,000 for 1999 through 2005, were not recorded or were recorded incorrectly in the accounting system. In addition, transmission costs totaling \$14,042,000 and station service costs totaling \$181,000 for 1999 to 2001, and 2003 to 2005 were not recorded properly in the accounting system. These errors result in an understatement of Metropolitan's variable component by \$3,529,000 and an overstatement of the minimum component by \$3,468,000 in the 2010 Statement of Charges. (TABLE B, Item 39)
- The Devil Canyon Second Afterbay Charges for debt service were understated by \$113,000 for 2003 through 2008 due to the use of an outdated debt service schedule. As a result, Metropolitan's variable charges in the 2010 Statement of Charges were understated by \$91,000. (Table B, Item 40)
- Minimum transmission charges for 2006 and 2007 were understated by \$207,000 and minimum station service charges for 2006 and 2008 were understated by \$881,000, resulting in an underbilling of \$707,000 to Metropolitan's transportation minimum component in the 2010 Statement of Charges. (TABLE B, Item 41)
- The Tehachapi Second Afterbay charge for debt service allocated to the power benefit included in the variable charges were understated by \$939,000 for 2004 through 2008 due to the use of an outdated debt service schedule. As a result, Metropolitan's transportation variable component in the 2010 Statement of Charges is understated by \$751,000. (TABLE B, Item 42)
- Actual contractor payment and water delivery amounts were not used in calculating the fish replacement charges and wheeling credits were outdated or excluded from the computation. In addition, the present value of water was incorrect due to an error in the formula calculating the amount. As a result, Metropolitan's variable component included in the 2010 Statement of Charges is understated by \$853,000. (TABLE B, Item 43)
- Costs for relocating the Division of Environmental Services for 2006, 2007 and 2008 totaling \$1,406,000 were not properly allocated in the cost accounting system, resulting in these costs not being included in the 2010 Statement of Charges. As a result, Metropolitan's transportation minimum component is understated by \$914,000. (TABLE B, Item 44)
- After adjusting the variable component for Hyatt Units 1, 3 and 5 historical refurbishment costs in the 2007 Statement of Charges, an additional \$1,241,000 of refurbishment costs were incorrectly allocated to the Thermalito Power Features reach, and thus were incorrectly excluded from the variable component. The exclusion of the refurbishment costs at Thermalito from the variable

component results in an understatement of \$993,000 in Metropolitan's 2010 Statement of Charges. (TABLE B, Item 45)

Findings Resulting in Credits, Refunds and Adjustments:

- There was an inconsistency in the application of the recreation Project purpose split between two components of the WSRB Surcharge computation. The error resulted in the overstatement of the WSRB Surcharge in the 1990 through 1993 Statements of Charges totaling \$933,000, of which Metropolitan's share is \$555,000. In addition, as noted in prior year, certain costs were excluded from the computation of the 1992 Surcharge, which results in an overstatement of Metropolitan's 1992 Surcharge of approximately \$100,000. (TABLE C, Item 1)
- The Department excluded \$19,644,000 of Coastal Branch capital costs that were recovered through the transportation variable component from the computation of the 2000 Surcharge, which results in these costs being billed to the contractors twice, resulting in an overstatement of Metropolitan's 2000 Surcharge by \$632,000. (TABLE C, Item 2)
- In our testing of the SMIF interest refund, we noted errors in the calculation, causing Metropolitan's portion of the refund to be overstated by \$6,000. (TABLE C, Item 3)

Special Projects

In addition to our planned audit procedures, we perform special assignments at the request of Metropolitan during the year. During our audit of the 2010 Statement of Charges no special work was performed.

Participation in Meetings

Status Meetings with Metropolitan. We meet periodically with Metropolitan's staff to discuss current State Water Project issues facing Metropolitan, to provide information used to formulate Metropolitan's position on issues or methodologies and to apprise Metropolitan of the current status of issues that are part of our special work. These meetings are a forum whereby we maintain close contact with Metropolitan's staff to ensure that Metropolitan's management direction is being pursued and to address matters that may require immediate action.

Audit-Finance Committee. We participate with Metropolitan staff in the monthly State Water Contractors' Audit-Finance Committee, which is also attended by representatives from the State Water Contractors, other water contractors and the Department. The meetings are intended to provide the contractors with updates from the Department on financial matters and cost estimate changes and to resolve issues affecting the Department's accounting, billing and budgeting procedures and systems.

Other Meetings. We are called upon by Metropolitan to participate in special water contractor meetings as the need arises. Meetings we attended over this past year pertained to Delta minimum costs.

EAST BRANCH ENLARGEMENT

During April 1986, Metropolitan and the Department entered into Amendment No. 19, known as the East Branch Enlargement Amendment, to the basic Water Service Contract which established the basis for repayment of the costs of enlarging the East Branch of the California Aqueduct. The Enlargement project entailed raising the canal lining between Pearblossom Pumping Plant and Lake Silverwood, enlarging the Alamo and Devil Canyon Powerplants, enlarging the Pearblossom Pumping Plant, building the Mojave Siphon Powerplant and the Devil Canyon Bypass and enlarging various other aqueduct features.

The Enlargement work was in addition to the Mojave Division modification to correct the basic capacity deficiency. The modification included raising the canal lining between Alamo and Pearblossom and related improvements to increase operational efficiency and storage capability in those reaches. Where practical, modification and Enlargement work are being done at the same time to take advantage of economies of scale. However, the modification costs are recovered through the transportation capital component and the Enlargement costs are recovered through the East Branch Enlargement component.

We have examined the allocation of costs between the modification and Enlargement, reviewed cost estimates and other data for proper determination and inclusion, reviewed debt service costs of Water System Revenue Bonds that are included in the Enlargement component and examined the methodologies used by the Department in computing the Enlargement component of the Statement of Charges. We found several items, which are noted in the following paragraphs.

Capital Component of the East Branch Transportation Charge

The Department developed an allocation methodology in 1994 that has not officially been accepted by the contractors. See page 26 for a discussion of open issues related to the allocation methodology. Although the Department has not finalized its allocation of East Branch Enlargement costs, adjustments were made to permanently remove East Branch Enlargement capital costs incurred through 1999 from the cost accounting system to prevent the double billing of these costs in the Enlargement component and the transportation capital component. During our review of the documentation used to prepare these adjustments, we noted the Department continues to use data from the Bulletin 132-98 Cost Analysis System (CAS) report to remove East Branch Enlargement costs from the cost accounting system. This CAS report contains actual costs only through 1996 and estimated costs for 1997 through 1999 and also contains amounts that are inconsistent with amounts in the cost accounting system. Because of the inconsistent data in the CAS report, the East Branch Enlargement capital costs are not being properly removed from the accounting system. We determined that \$9,716,000 of historical capital costs were not removed from the computation of the 2010 Statement of Charges, which understates the costs allocated to enlargement and overstates the transportation capital component. If the amounts in the accounting system were to be used to prepare the entries to permanently remove East Branch Enlargement capital costs from

the contractors' billings, Metropolitan's transportation capital component could decrease by \$871,000. The Department is aware of the fact that the costs used in the allocation process were outdated and need to be revised, but have not had the time to make the revisions. We will continue to monitor these differences to ensure adjustments are made in conjunction with the finalization of the East Branch Enlargement allocation methodology.

Minimum Component of the East Branch Transportation Charge

In accordance with the terms of Amendment No. 19, O&M costs which cannot be attributed solely to the Enlargement "shall be shared in accordance with a formula to be developed by the State in consultation with contractors participating..." in the Enlargement. The Department has arrived at a methodology for allocating some of the minimum costs that were previously billed under the transportation minimum component to the East Branch minimum component to comply with the Amendment. We reviewed the allocation methodology noting that in past years the preliminary allocation factors were applied to minimum costs beginning in 1995, which was consistent with the Department's memo on the "Allocation of East Branch Costs" prepared in September 1994, noting that the projected completion date for the East Branch facilities was November 1995; however, the Department's latest allocation methodology memo for O&M costs indicates an activation period range of 1992 to 1996. There appears to be some inconsistency in the activation dates utilized to allocate O&M costs to the East Branch component. In addition, the allocation factors used by the Department are considered interim allocation factors. The Department's allocation memo describes an alternative procedure for determining the proportionate minimum OMP&R costs; however, these procedures have not yet been implemented. We will continue to monitor these situations until a final allocation methodology has been agreed upon and will work with Metropolitan staff to evaluate this proposed allocation methodology and the activation dates.

Debt Service Costs

Initial plans for Stage Two of the East Branch Enlargement called for the addition of two units at Pearblossom Pumping Plant and one unit at Alamo Powerplant. The 2010 Statement of Charges does not include projected Stage Two costs because bonds have not yet been issued to finance this work. However, the Department has estimated a date for initial operation of Stage Two of July 2017. The Department does not have current projections of the total costs for this work due to the project currently being on hold. We will continue to monitor this project and the Department's proposed allocation methodology.

Mojave Siphon Second Siphon and Intake Costing

The original plan for the Mojave Siphon Powerplant was to use the existing barrel and build a second siphon consisting of three new pipelines to handle the additional flows due to the Enlargement, in which case the second siphon would be allocated 100% to Enlargement. However, the plan was revised such

that all water would flow through the second siphon to the Powerplant and that the first siphon would be abandoned. Thus, the costs of the second siphon and the intake should be allocated between Enlargement and transportation capital; however, the Department has continued to allocate these costs as 100% Enlargement. As a result, the total capital costs allocated to Enlargement for Metropolitan, from 1988 to 2024, are overstated by approximately \$10,860,000, and capital costs allocated to transportation capital are understated by approximately \$11,655,000 through 2035. The effect on Metropolitan's 2010 Statement of Charges is to overstate the Enlargement component by \$624,000 and to understate the transportation capital component by \$670,000. This error will be corrected in conjunction with the finalization of the East Branch allocation methodology.

East Branch Cost Allocation Methodology

The methodology used by the Department to allocate costs to the Enlargement and the modification is still considered an interim or temporary approach. Higher priority projects have delayed the finalization of the allocation. We provided the Department with a description of East Branch Enlargement and excess capacity incremental cost allocation issues in 1991. The Department has indicated that consideration will be given to Metropolitan's concerns while developing the revised East Branch Enlargement allocation methodology. The following issues were addressed in the information given to the Department.

Incremental Costs. Several methods have been proposed in studies to allocate costs between the modification and Enlargement. These methods include using incremental costs of Enlargement work for activities such as the Alamo Powerplant and Pearblossom Pumping Plant enlargements and using ratios of Enlargement capacity to total capacity for activities such as raising the canal lining and the Mojave Siphon Powerplant. We believe the incremental cost method should be used as the primary method of allocating costs. Since incremental cost data is not available, we were unable to calculate the impact such a change would have on Metropolitan. However, we believe the savings that would probably result could have a significant effect on Enlargement costs and on Metropolitan's Statement of Charges.

Canal Lining Costs. In our prior report, we concluded that canal lining costs between Alamo and Pearblossom should be allocated on an incremental basis. The Department agrees that a 75% allocation of canal costs to Enlargement is not an incremental allocation as required by the contract. However, the Department has not yet determined what the proper allocation should be. As we have previously reported, a Design and Construction study was to be prepared to determine the incremental amount. The Department has not completed the study and does not appear to be actively working on it. In the interim, the 75% allocation is used. It is anticipated that the Enlargement cost determined by the incremental method will be significantly less than that determined by the proportional method.

Enlargement Capacity. Amendment No. 19 lists the enlargement capacity of each reach in cubic feet per second (CFS) for Metropolitan and in aggregate with other participating contractors. These factors were

to be used to allocate Enlargement costs among the participating contractors. Several of the capacity figures have been revised and new reaches have been created. Specifically, reach 23 was originally listed at 1,683 CFS. This reach has since been divided into 23B at 1,663 CFS and 23C at 1,451 CFS. Also, reach 26A was originally listed at 1,600 CFS but has since been divided into 26A at 1,539 CFS and, as a result of Amendment No. 21 with Metropolitan, 26B at 300 CFS. These capacity revisions have resulted in Metropolitan paying a higher proportion of costs at each affected reach. The impact on Metropolitan is an increase in capital costs of approximately \$10,600,000 over the bond repayment period and an increase in O&M costs of approximately \$2,300,000 over the Project life.

Right-of-Way Costs. Mojave Division Land and Right-of-Way costs resulting from the Enlargement have been allocated to various reaches based upon out-of-date estimates made in 1979. We believe a current analysis of the costs per reach should be developed and used by the Department. The Department's current allocation study does not address this issue. Since such data was not currently available, we were unable to determine the effect on Metropolitan.

Allocations Studied. We studied the allocations listed below during our examination of the Enlargement. The Department issued a draft report on the current and proposed methods of cost allocation in late 1994. However, due to the complexity of the Enlargement, we recommend that Metropolitan's staff consider further examination of the Department's allocation of costs for the following items:

Past Costs. It is not clear that all past costs, such as the costs of building bridges to accommodate a future enlargement, have been properly allocated.

Pearblossom Pumping Plant. The Department has allocated costs of increasing the capacity of Pearblossom, including adding additional units, to the Enlargement. However, costs of installing a spare unit have been assigned to the modification. Although the spare unit is entirely for modification purposes, it is questionable as to whether or not the allocation of the spare unit as 100% modification is incremental since economies of scale are achieved by building more than one unit. We suggest Metropolitan review the allocation of specific facets of the construction costs between the spare unit and the additional units for reasonableness.

Devil Canyon Powerplant. Construction costs for the Devil Canyon facility have been divided between the Enlargement and modification by the Department's Design and Construction staff. Because Devil Canyon costs make up more than one-third of total Enlargement costs, we will work with Metropolitan's staff to review the Department's cost estimates.

Mojave Siphon Powerplant. This facility has been allocated between the Enlargement and the modification based on ratios of capacities required for Enlargement and non-Enlargement purposes. We question the Department's decision not to use the incremental cost allocation

approach for this facility. Because of the complexity of cost allocations for this facility, we will work with Metropolitan's staff to study the allocations between modification and Enlargement.

Although the method of allocating Mojave Siphon costs did not change, certain assumptions that underlie the method changed in 1996, which resulted in lower capital costs charged to the Enlargement. The change in assumptions resulted in a reduction of Enlargement capital costs and an increase of capital costs under the transportation component in an approximate amount of \$1,992,000. The effect of this change on the Statements of Charges is to increase the capital component by approximately \$76,000 each year and reduce the Enlargement component by approximately \$1,500 each year. The assumptions and allocations used can have a large effect on Metropolitan's Statement of Charges depending on whether costs are considered Enlargement or non-Enlargement. This change in assumption is worthy of investigation. The entire allocation method and assumptions used for this project have yet to be finalized. We will continue to work with Metropolitan to review the revised allocation method.

Alamo Powerplant Enlargement. Costs for the Alamo Powerplant Enlargement consist of expenditures for Unit 1 facilities allocated to Enlargement and the construction of Unit No. 2, which has been deferred. We recommend Metropolitan's staff review these cost allocations for reasonableness.

A memo has been developed that lays the groundwork for performing the detailed allocation computations for the final allocation methodology and was distributed to the water contractors for review and discussion in October 1994. Due to the complexity of the East Branch Enlargement and the large costs involved, we believe that joint participation in the allocation methodology is necessary in order to assure that the final allocation methodology is fair and equitable to all parties involved. The Department had planned to present its allocation methodology to all East Branch contractors. The discussion and implementation of the new methodology has been deferred due to higher priority projects.

WATER SYSTEM REVENUE BOND SURCHARGE

In March 1987, Metropolitan signed Amendment No. 20 to the Water Service Contract. This Amendment provides a means of financing Project improvements without affecting the Project Interest Rate or resulting in a “one-shot” adjustment as the Project Interest Rate changed. Under the Amendment, Project improvements are financed through the issuance of Water System Revenue Bonds. The costs of these bonds are recovered through the Delta Water Charge and transportation capital components and, in lieu of a Project Interest Rate adjustment, through the Water System Revenue Bond Surcharge.

Surcharge Calculation

In conjunction with the development of the new SAP/CARA system in 2000, the Department developed a new calculation of the WSRB Surcharge using the SAP/CARA system. However, this new system produced a Surcharge that was significantly different from the estimated Surcharge amounts calculated as part of the 2000 Statement of Charges. As a result, since the implementation of SAP, the Department has billed the contractors the estimated WSRB Surcharge amounts that were included in the 2000 Statement of Charges, Attachment 3, which was calculated in 1999. The Department has not been able to determine why the SAP/CARA system produces a Surcharge that is inconsistent and unreasonable compared to previous computations. As a result, in the 2010 Statement of Charges, the Department calculated the 2010 WSRB Surcharge using the relative proportion of the Surcharge to total debt service from the 2002 Statement of Charges and applied that proportion to 2010 debt service costs that include WSR bonds through Series AF issued in June 2009. In addition to these debt service costs, the Department included \$3.5 million for on-aqueduct bond cover costs.

The Department has taken the position that it will only issue bonds with maturities up to 2029 because the water supply contracts expire in 2035. As a result, the WSR bonds Series AF are 21-year bonds whereas the Department has historically issued bonds with a 30-year life. This shorter term results in a significant increase in the surcharge and other components where debt service costs are billed to the contractors. Also, components where actual capital costs are billed to the contractors are increasing because these costs are being amortized over the remaining contract term of 25 years instead of the 50 years stated in its water supply contracts. The SWC has established a committee to address future financing of the Project and the extension of the water supply contracts past 2035.

Inclusion of On-Aqueduct Bond Cover in Surcharge

As previously mentioned, the WSRB Surcharge continues to include approximately \$3.5 million for on-aqueduct bond cover costs. Due to the Department’s cash flow position, the Department decided to eliminate the annual transfer of revenues from the Systems Revenue Account to the Revenue Fund to satisfy bond cover requirements for on-aqueduct power facilities and instead collect this amount from the contractors. The cover requirement will be met by including on-aqueduct bond cover in the Water

System Revenue Bond Surcharge beginning in the 2004 Statement of Charges. Approximately \$3,485,000 of bond cover was included in the 2010 Water System Revenue Bond Surcharge. The cover will be collected in one year and returned the following year. We verified that the cover being collected has been properly returned. However, the principal and interest costs on the on-aqueduct power facilities bonds will not be included in the Surcharge since the costs of these facilities are recovered through the transportation capital component.

Prior Unresolved Surcharge Calculation Issues

In prior year audits, our examination of the Department's calculations of the Surcharge disclosed errors in the Surcharge that have not yet been corrected. We will continue to monitor these issues until they are resolved. Although the Department contends that the water supply contract does not provide for adjustments to the Surcharge amounts, we believe that if errors are made, corrections to the Surcharge should be made. We will continue to work with the Department to evaluate the possibility of allowing past adjustments. The following items warrant revisions to the Surcharge.

- ◆ The WSRB Surcharge calculation is designed to recover capital costs that are not otherwise recovered through the Delta Water Charge and transportation capital charges. The Surcharge calculation is adjusted for capital costs that are recovered through the Delta Water Charge and transportation capital charges. Reducing the amount of the recovered capital costs in the Surcharge computation increases the Surcharge paid. Commencing with the 2000 WSRB Surcharge computation, the Department incorrectly reduced the amount of recovered capital costs in the Surcharge computation, the Department incorrectly reduced the amount of recovered capital costs in the Surcharge calculation by \$19,644,000. These capital costs of \$19,644,000 are the annual charges associated with sizing the Coastal Branch to take advantage of off-peak pumping. These costs are initially recovered from the Coastal Branch contractors through the transportation capital charge. As these costs are energy related, the costs are refunded to the Coastal Branch contractors through Attachment 4D to the Statement of Charges and then billed to all contractors through the variable component. As a result of the Department incorrectly lowering the amount of recovered capital costs in the Surcharge calculation, these costs are billed to the contractors twice, first through the WSRB surcharge, and secondly through the variable component. In the 2000 Statement of Charges, this error resulted in the overstatement of the WSRB Surcharge by \$1,077,000, of which Metropolitan's share is approximately \$632,000. This same error has occurred in the WSRB Surcharge calculation each subsequent year from 2001 through 2009.
- ◆ During our audit of the 2000 WSRB Surcharge, we also noted the following discrepancies that we will address with the Department through the Audit-Finance Committee to reach resolution.

These items were not quantified because either the amount is not determinable or the expected impact was not considered to be significant.

- ◆ The credits for capital costs recovered from other components were overstated by \$600,000 related to various small projects due to a data entry error, resulting in an underbilling of the Surcharge by \$20,000.
- ◆ Outdated proportionate use of facilities factors were used in determining the transportation capital credit.
- ◆ Bond proceeds allocated to the Coastal Aqueduct and East Branch Improvement projects, used in the computation of the transportation capital component, exceed capital costs to be reimbursed through the capital cost component of the transportation charge, shown in Bulletin 132-99, Table B-10, by \$33,101,000 and \$38,235,000, respectively. This discrepancy results in the credits in the WSRB Surcharge calculation for capital costs recovered from the transportation capital component being overstated, which would potentially understate the Surcharge. The Department has indicated to us that they are researching the reason for these discrepancies. The \$38,235,000 difference includes the \$19,644,000 of Coastal costs allocated to power discussed previously.
- ◆ We noted that costs were excluded from the transportation and conservation calculations used to compute the 1992 Surcharge totaling \$1,370,000 and \$2,513,000, respectively. These excluded transportation costs represent less than 1% of total costs included in the Surcharge. The excluded conservation costs represent approximately 3% of total costs. These errors resulted in the overstatement of Metropolitan's 1992 Surcharge by approximately \$100,000.
- ◆ Also noted was an inconsistency in the application of the recreation Project purpose split between two components of the WSRB Surcharge computation. This error results in the overstatement of the WSRB Surcharge in the 1990 through 1993 Statements of Charges totaling \$933,000, of which Metropolitan's share is \$555,000.
- ◆ During our audit, we compared the WSRB Surcharge amounts included in Table B-22 of Bulletin 132-09 to those billed in the Statements of Charges. We have noted that these amounts do not agree. A portion of this difference is because the debt service cover that was originally included in the WSRB Surcharge is appropriately removed from Table B-22 after it has been returned to the contractors. Other differences appear to be the result of changes to debt service amounts as a result of the refunding of bonds, which the Department adjusts for in Table B-22. These adjustments to debt service are permanent differences between Table B-22 and the WSRB Surcharge because the Department does not retroactively adjust the WSRB Surcharge. These differences for years 1989 through 2008 total \$36.2 million and appear to result in an over-billing

to the contractors. We recommend that the Department and the contractors consider whether adjustments to the WSRB Surcharge calculation are in accordance with the contract amendment so that the savings realized by the Department as a result of the refunding of bonds are properly reflected in the contractors' charges.

Future Charges

Because all new Project construction (as provided for under Article 1(hh) of the State Water Contract) except off-aqueduct, Coastal Branch Extension, East Branch Enlargement, Devil Canyon, Castic and Tehachapi Second Afterbay is being financed through this component, the Surcharge may increase in future years. These increases in the Surcharge are not reflected in the Department's estimates of future charges reported in Attachment 3 to the Statement of Charges.

VARIABLE AND MINIMUM ENERGY CHARGES

The Project is both a producer and consumer of electrical energy. Project facilities produce energy which is used by pumping plants to deliver water to the contractors. The net cost of delivering this water is billed through the variable and off-aqueduct minimum cost components. Energy requirements not met by Project generation are obtained through purchases from outside sources. Energy not needed to deliver water to the contractors is sold at current market rates.

In 1983, the Department's suppliers contract with three major California utilities was terminated and the Department began operating as an electric utility as well as a water agency. In order to minimize its dependence on major energy suppliers and also obtain energy at a reasonable cost, the Department acquired a variety of power resources. The Department's major resources include Department-owned and purchased hydroelectric power, off-aqueduct coal-fired energy, exchange energy obtained under two long-term energy contracts with Duke Energy and agreements with several utilities for the discretionary purchase of short-term firm capacity and associated energy plus arrangements for economy energy purchases. Also included in the cost of energy are ancillary services agreements with the independent systems operators whereby the Department reduces their energy load so that energy is available for other users or the Department requests that other energy users reduce their load so that energy is available to the Department. This energy management process is used to reduce the need to purchase on-peak energy, which would be more expensive. The cost of energy from these sources is significantly higher than the three mills per kilowatt-hour for which energy was purchased under the old Suppliers Contract. For instance, the rate for 2008 was 32 mills per kilowatt-hour.

Computation of the Variable Component

Prior to the implementation of SAP, the Department computed the variable component outside the accounting system and the costs included in the variable component within the accounting system were manually adjusted to equal computations prepared by the Joint Operations Control Center (JOCC) personnel. Upon the implementation of SAP, beginning with 1999 and through 2005, the costs included in the variable component were not manually adjusted to equal the JOCC's computation, but were calculated within the SAP accounting system. While the Department has developed reconciliation procedures to ensure the SAP system contains accurate information, the entries to record the reconciled differences are sometimes not made until after the Statement of Charges is prepared. However, we have noted an improvement in the quality of the reconciliations and in the timing of the entries being made. During our audit of the 2007 Statement of Charges, we performed procedures to reconcile the SAP accounting system to the most current cost information maintained by the JOCC for 1999 to 2005 variable costs and identified all significant differences not posted to the accounting system. We noted errors primarily related to the posting of transactions on the cash basis instead of the accrual basis and various other mispostings. See the following pages for the effect of these errors on the Statement of

Charges. During our current and prior year review of entries made to the accounting system, we noted that the Department has recorded some adjustments to correct energy charges; however, because SAP was not used to compute the past cost adjustment for the variable charges in the 2010 Statements of Charges, the corrections are not reflected in the contractor's charges. These revisions will be reported when the Department uses SAP to prepare the Statement of Charges. We provided the Department with our list of reconciling differences during a prior audit so that corrections could be made. We would anticipate some corrections will be made for the 2011 Statement of Charges and others when the power cost allocations for these years are finalized.

We noted during our reconciliation procedures that the JOCC is maintaining historical power cost and revenue data on a spreadsheet, which replaces the power cost database system that is no longer functional, for use in developing Final Allocation of Power Cost memos (FALPOC's). These records are maintained in addition to the power costs and sales being recorded in SAP. The Department has developed a Power Cost Distribution (PCD) system to automate the accumulation and distribution of State Water Project power costs, which will eliminate the need for these manual spreadsheets. However, this system has not yet been integrated with SAP. We will utilize this new system in our audit when it is implemented, and will evaluate whether it is interfacing properly with SAP.

The SWP Natural Gas Hedging Program established in 2005 allows the Department to enter into commodity futures trading activities to better manage the costs of energy in an effort to maintain constant power prices and eliminate significant spikes. The Department has contracted with AG Edwards to carryout the trading activities. As the hedging contracts are settled, realized gains and losses are recorded monthly. The expenses are included as part of the net annual power costs and are billed as part of the transportation variable charges. We noted a Natural Gas Hedging Settlement charge for 2006 of \$6,716,000 and credits of \$282,000 and \$455,000 for 2007 and 2008, respectively, were included in the transportation variable charges.

2008 Energy and Transmission Costs: Our review of the 2008 variable energy charges and discussions with Department personnel disclosed that the variable energy charges were not calculated using the power costs and power sales from the SAP accounting system for the 2010 Statement of Charges. It is our understanding that, due to difficulties encountered due to the upgrade of the SAP system, SWAPO used the net power costs summarized on Table 10 of the 12-Table study prepared for 2008 plus variable transmission costs for computing the 2008 charges. Variable charges for 2007 and prior years were left as reported in the April rebill of the 2007 Statement of Charges as a result of the system problems.

We compared this summary of power costs used in the calculation of the Statement of Charges to the amounts in SAP, adjusted for known mispostings, and estimate that the 2008 variable charges are overstated by approximately \$4,012,000, which results in an overbilling of \$3,209,000 in Metropolitan's 2008 transportation variable component in the 2010 Statement of Charges. The Department has indicated

that the contractor's variable charges will be recomputed and revised in the rebill of the 2010 Statement of Charges.

During our review of the 2008 energy charges, we noted that the minimum station service costs were understated by \$917,000. This error resulted in an underbilling of \$596,000 to Metropolitan's transportation minimum component in the 2010 Statement of Charges. We have informed the Department of this error.

Our reconciliation of the SAP system and the records maintained at the JOCC revealed that 2008 power revenues were overstated due to the misposting of an Enron Power Marketing Inc. invoice. We also noted that the tables used to allocate power costs to pumping plants were not updated in SAP. These findings do not affect Metropolitan's 2010 Statement of Charges because SAP was not used to calculate the variable component. We have informed the Department of these findings and will continue to monitor them since SAP will eventually be used to generate the variable component.

2007 Energy and Transmission Costs: As discussed above, the Department is calculating the 2007 variable energy charges based on Table 10 of the 12-Table study instead of using the power costs and power sales from the SAP accounting system for the 2010 Statement of Charges. We compared this 2007 summary of power costs used in the calculation of the Statement of Charges to the amounts in SAP, adjusted for known mispostings, and estimated that the 2007 variable charges were overstated by approximately \$6,245,000, which results in an overbilling of \$4,996,000 to Metropolitan's transportation variable component in the 2010 Statement of Charges. The Department has indicated that the contractor's variable charges will be recomputed and revised in the rebill of the 2010 Statement of Charges.

During our review of the 2007 energy charges, we noted that the minimum transmission charges were understated by \$119,000. This error results in an underbilling of \$77,000 to Metropolitan's transportation minimum component in the 2010 Statement of Charges. We have informed the Department of this error.

2006 Energy and Transmission Costs: The same as for 2008 and 2007, the Department is calculating 2006 variable energy charges using Table 10 of the 12-Table study plus variable transmission and Hyatt-Thermalito refurbishment costs, instead of using the power costs and power sales from the SAP accounting system for the 2010 Statement of Charges. We compared the 2006 summary of power costs used in the calculation of the Statement of Charges to the amounts in SAP, adjusted for known mispostings, and estimated that the 2006 variable charges were overstated by approximately \$324,000, which results in an overbilling of \$259,000 to Metropolitan's 2006 transportation variable component in the 2010 Statement of Charges. The Department has indicated that the contractor's variable charges will be recomputed in the rebill of the 2010 Statement of Charges.

During our review of the 2006 energy charges, we noted the 2006 minimum transmission charges are understated by \$88,000 and the 2006 minimum station service charges are overstated by \$36,000. These errors result in an underbilling of \$34,000 to Metropolitan's transportation minimum component in the 2010 Statement of Charges. We have informed the Department of these errors.

Net Overbilling of 1998 through 2005 Energy and Transmission Costs: In our previous reconciliations of the systems maintained by the JOCC and the accounting department, we compared energy, transmission and station service costs in the SAP accounting system to information recorded in the 1998 FALPOC, the 1999 draft FALPOC or the JOCC's database. Since the amounts in SAP will eventually be used in the preparation of the Statement of Charges, the differences between SAP and the FALPOC's or SWPAO's information will result in errors in the bills. We do not anticipate that these adjustments will be made until the FALPOC's are issued in final form by the Department. These differences in variable and minimum costs are as follows:

	(Under-) Overstatement	
	Variable Costs	Minimum Costs
1998	\$ 2,480,000	\$ (388,000)
1999	4,683,000	(2,848,000)
2000		3,273,000
2001		4,000
2003		1,837,000
2004	1,177,000	(2,041,000)
2005	(10,590,000)	4,220,000
Total (under-) overstatement of costs	<u>\$ (2,250,000)</u>	<u>\$ 4,057,000</u>

After the application of the water tables, these differences result in an understatement of Metropolitan's 2010 variable component by approximately \$2,481,000 and overstatement of the minimum component by \$3,326,000. These errors are described in more detail in the following paragraphs.

1998 Energy and Transmission Costs: During our reconciliation of 1998 energy, transmission and station service costs, we noted that power costs are overstated by \$2,659,000, power sales are understated by \$501,000, transmission costs are understated by \$293,000, station service costs are understated by \$95,000 and Coastal power costs are understated by \$680,000 in the accounting system, which was used to prepare contractor billings. These errors are due to the accounting system not reflecting the most current energy costs available from the FALPOC and not reflecting as a revision for the redetermination of Coastal power costs allocated to the variable component. These errors resulted in an overstatement of Metropolitan's variable component by \$1,048,000, and an understatement of the minimum component by \$142,000 in the 2010 Statement of Charges. Because of the difficulty in revising costs in SAP prior to 1999, the Department has indicated that they do not plan to make corrections for these errors. However,

because of the significance of the various adjustments related to 1998 charges, we will propose that the Department make these corrections.

1999 Energy and Transmission Costs: During our reconciliation of 1999 energy, transmission and station service costs, we noted the following items:

- Power costs for 1999 are overstated by \$2,544,000 and power sales are understated by \$2,138,000 due to the double posting of amounts, recording portions of California Independent System Operator (CAISO) bills as revenue instead of a cost and the posting of amounts to the incorrect year. The effect of these errors is to overstate Metropolitan's variable and minimum components by \$2,542,000 and \$154,000, respectively, in the 2010 Statement of Charges.
- Transmission costs included in contractor billings were understated by \$2,667,000 due primarily to the Department including credits from an internal order that should not be included in contractor billings. In addition, station service costs calculated by SWPAO totaling \$181,000 were not recorded in the SAP system. The result of these errors is to understate Metropolitan's transportation minimum component by \$1,851,000 in the 2010 Statement of Charges.
- Different allocation factors were used to allocate power costs for 1999 in the SAP system compared to the former UCA accounting system, which was used for January to June 1999 costs. We were unable to determine a dollar impact of this inconsistency; however, the amount is not expected to be material.

2000 Energy and Transmission Costs: During our reconciliation of 2000 energy, transmission and station service costs, we noted the following items:

- Transmission costs billed to the contractors are overstated by \$3,273,000 due to incorrect postings in the SAP system. As a result, Metropolitan's minimum charges are overstated by \$2,127,000 in the 2010 Statement of Charges.

2001 Energy and Transmission Costs: During our reconciliation of 2001 energy, transmission and station service costs, we noted the following items:

- Transmission costs were overstated by \$4,000 due to incorrect postings in the SAP system. The result of this error is to overstate Metropolitan's minimum charges by \$3,000 in the 2010 Statement of Charges.
- Different allocation factors were used to allocate transmission costs to powerplants for 2001 in the SAP system compared to the factors used by SWPAO in the PALPOC. We did not determine a dollar impact of this inconsistency; however, the amount is not expected to be material.

2002 Energy and Transmission Costs: During our reconciliation of 2002 energy, transmission and station service costs, we noted the following items:

- The accounting system reflected the most current energy costs and sales that reconciled to SWPAO's power costs and sales data with minor differences.
- Different allocation factors were used to allocate transmission costs to powerplants for 2002 in the SAP system compared to the factors used by SWPAO in the PALPOC. We did not determine a dollar impact of this inconsistency; however, the amount is not expected to be material.

2003 Energy and Transmission Costs: During our reconciliation of 2003 energy, transmission and station service costs, we noted the following items:

- Transmission costs were overstated by \$1,837,000 due to incorrect postings in the SAP system. As a result, Metropolitan's minimum component is overstated by \$1,194,000 in the 2010 Statement of Charges.
- ◆ Different allocation factors were used to allocate transmission costs to powerplants for 2003 in the SAP system compared to the factors used by SWPAO in the PALPOC. We did not determine a dollar impact of this inconsistency; however, the amount is not expected to be material.

2004 Energy and Transmission Costs: During our reconciliation of 2004 energy, transmission and station service costs, we noted the following items:

- Power costs were overstated by \$1,269,000 and power sales were overstated by \$92,000 due to errors in recording power costs and sales, including CAISO invoices. The effect of these errors is to overstate Metropolitan's variable and minimum components by \$920,000 and \$47,000, respectively, in the 2010 Statement of Charges.
- Transmission costs were understated by \$2,041,000 due to incorrect postings in the SAP system. The result of this error is to understate Metropolitan's minimum charges by \$1,327,000 in the 2010 Statement of Charges.
- Different allocation factors were used to allocate transmission costs to powerplants for 2004 in the SAP system compared to the factors used by SWPAO in the PALPOC. We did not determine a dollar impact of this inconsistency; however, the amount is not expected to be material.

2005 Energy and Transmission Costs: During our reconciliation of 2005 energy, transmission and station service costs, we noted the following items:

- Power costs were understated by \$11,035,000 and power sales were understated by \$446,000 due to errors in recording power costs and sales, including CAISO invoices and variable transmission. The effect of these errors is to understate Metropolitan's variable component by \$6,991,000, and

to overstate Metropolitan's minimum component by \$378,000 in the 2010 Statement of Charges.

- Minimum transmission costs were overstated by \$4,220,000 due to incorrect postings in the SAP system. The result of this error is to overstate Metropolitan's minimum charges by \$2,743,000 in the 2010 Statement of Charges.
- Different allocation factors were used to allocate transmission costs to powerplants for 2005 in the SAP system compared to the factors used by SWPAO in the PALPOC. We did not determine a dollar impact of this inconsistency; however, the amount is not expected to be material.

Uncollected Power Revenues. Uncollected power revenues totaling \$15,860,000 for 2000 and \$8,040,000 for 2001 were excluded from the computation of the variable component due to the difficulty the Department has had in collecting these receivables, which are due primarily from CAISO, Enron Power Marketing, Inc. and Pacific Gas & Electric. The Department will not post the credit to the contractors' bills until payment is received from these agencies. When or if these amounts are collected, Metropolitan's variable component would decrease by approximately \$17,018,000.

LADWP Peaking Payment. In our audit of the 2007 Statement of Charges, we noted the Department excluded the LADWP peaking payment of \$587,000 in the calculation of the variable unit rates for 2005. The Department has now properly recorded this credit in the accounting system; however, because SAP was not used to calculate the variable charges, this correction is not included in Metropolitan's 2010 Statement of Charges. The exclusion of this credit results in an overstatement of \$470,000 to Metropolitan's 2005 variable component in the 2010 Statement of Charges. We also noted that the 2008 LADWP peaking payment of \$582,500 was incorrectly recorded as \$528,500. However, because SAP was not used to calculate the variable charges, this discrepancy did not result in a billing error.

Variable Billing Recalculation. Our audit procedures include the recomputation of Metropolitan's 2008, 2009 and 2010 variable calculated components. The charge is calculated by multiplying water deliveries in B-5A by the B-17 variable unit rates. Our procedures disclosed that the 2008 variable calculated component included in the 2010 Statement of Charges was incorrectly calculated, resulting in an overbilling of Metropolitan's variable component by \$4,242,000. The Department has indicated that they will correct this error in the 2010 rebilling.

For deliveries taken below the Banks Pumping Plant, a credit for water extracted at that reach is multiplied by the B-17 rates. Our prior year procedures disclosed that the Department excluded a 5,000 acre-feet credit for water taken by Metropolitan at reach 12E in the San Joaquin Valley in the computation of the 2007 calculated component. Excluding this credit for the water taken from reach 12E results in billing the 5,000 acre-feet delivered from reach 12E as if it was pumped through the Banks Pumping Plant. The exclusion of this credit results in an overstatement of Metropolitan's variable component of \$73,000 in the 2010 Statement of Charges. We expected this error to be corrected in the

2009 rebilling, but it was not. We will continue to work with the Department to ensure this error is corrected.

We noted, as in the prior year, that the power costs included in Bulletin 132-09 Table B-3, which should summarize all power costs before the reallocation for water gains and losses and storage changes, appears to include only costs of water supply deliveries, after the reallocation for water gains and losses and storage changes for some years. We also noted that the costs in B-3 do not support the variable unit rates calculated in B-17, as stated in the introductory section of Bulletin 132-09. The B-17 rates, which are used to determine the calculated components of the variable component charges, for 2007 to 2010 are calculated by dividing the energy costs in Table B-12 by the water supply deliveries in Table B-6. However, our audit of the energy cost and sales data for these years included on Table 2 of the 12-Table energy study, prepared by the Department for estimating future net power charges, support the variable costs in Table B-3. Although 2006, 2007 and 2008 would have typically been billed using actual costs from the accounting system, as discussed on previous pages of this report, the Department is still calculating these charges based on the Table 2 of the energy study. We compared the costs included in B-3, which are supported by Table 2 of the energy study, to the plant costs on Table B-12, which were used to calculate the unit rates, and noted that the amounts in B-3 were higher for 2006, 2009 and 2010 by \$11,583,000, \$10,775,000 and \$9,415,000, respectively, and lower for 2007 and 2008 by \$821,000 and \$7,862,000, respectively. The difference between B-3 and B-12 costs, according to the introductory section of the B Tables, is the affect of the downstream allocation of costs for recreation, gains and losses in storage, evaporation and seepage. Because the differences are significant and the differences do not agree to the amounts noted in our testing of the Department's downstream process, we do not believe that this is the entire cause of the difference. We will continue to work with the Department to resolve these inconsistencies.

As a result of the inconsistencies between B-3 and B-12 discussed in the previous paragraph, we calculated unit rates using the B-3 costs supported by the energy study to determine the affect to Metropolitan's variable charges of using B-12 costs to calculate the unit rates instead of using B-3 costs. We noted that Metropolitan's variable calculated component would be higher by \$9,118,000, \$3,071,000, \$7,190,000 and \$6,254,000 for 2006, 2007, 2009 and 2010 and lower for 2008 by \$7,800,000 in the 2010 Statement of Charges had B-3 costs been used to calculate the unit rates. These amounts do not take into consideration the effects of the downstream reallocation of costs between variable and minimum for these years. The impact of this reallocation is discussed in the DOWNSTREAM DISTRIBUTION OF COSTS section of the report. We discussed these issues with the Department and they indicated that they are working to present the B Tables as described in Bulletin 132. We will continue to work with the Department to determine the cause of these differences.

Preliminary Power Memos – Open Items. It has been the Department’s policy to issue a Preliminary Power Memo summarizing estimated energy costs incurred during the year by category and by pumping plant. In subsequent years, when costs, sales, water deliveries, water gains and losses and reservoir storage changes are finalized, the Department issues a Final Power Allocation Memo. There are several complex items delaying the finalization of power costs for 2000 through 2008. These items include transmission service costs, special priced water costs and peaking service costs and adjustments to reflect the distribution of local inflow benefits for storm water inflow and ground water extraction. In addition, the value of recovery generation at Hyatt-Thermalito Powerplants needs to be revised to reflect actual O&M costs. We understand that the Department has been working on these updates and expects to have some of them completed in 2010.

Final Power Memo – Open Items. In 2005, the Department issued a FALPOC for 1998 and a draft FALPOC for 1999. In our testing of these FALPOC’s, we noted the following issues. The 1998 FALPOC included a peaking charge for 1998 of \$351,000, but the Department had not reduced the system power costs by this amount. If this peaking charge were included in the calculation of the variable charge, Metropolitan’s transportation variable and transportation minimum components would be reduced by \$150,000, and \$28,000, respectively. In addition, we noted errors in the calculation of the 1998 peaking service costs that understates these costs by \$206,000. Similarly, the 1999 FALPOC includes a peaking charge for 1999 of \$1,533,000, for which the Department has not reduced the system power costs. If this peaking charge were included in the calculation of the variable charge, Metropolitan’s transportation variable and minimum components would be reduced by \$817,000, and \$85,000, respectively. In addition, we noted errors in the calculation of the 1999 peaking service costs that appears to be understating these costs by \$202,000. We have informed the Department of the errors we noted in the 1998 and 1999 peaking computations and they are revising the calculations. In addition, we believe that the Department should reflect the corrected peaking amounts in the contractor’s charges.

During our audit of these FALPOC’s in 2005, we provided the Department with a memo describing the peaking error and other differences that we noted in our review of the 1998 and 1999 FALPOCs including the following:

- Power costs totaling \$747,000 and \$32,400 were excluded or recorded incorrectly in the 1998 and 1999 FALPOCs, respectively.
- The Department has developed a new methodology for summarizing Oroville O&M costs, that could change the amounts included in the FALPOC. We recommend that the Department evaluate the amount included for Oroville O&M costs in the 1998 and 1999 FALPOCs.
- The credits for special priced water and station service on Attachment 3 of the 1998 FALPOC were reflected as a decrease instead of an increase in the power sales credit.

- The 1998 and 1999 FALPOCs indicate that the decrease in net power costs and peaking service water charges will be billed to the contractors in the 2006 Statement of Charges. A revision of dates will be necessary to reflect the Statement of Charges billing date that the contractors' charges will be adjusted, which we believe will be the 2011 Statement of Charges.
- The transportation and conservation water included on the 1998 and 1999 report titled "Unit Rate Calculation" does not agree to Table B-6.
- Water deliveries on the report titled "Final Test and Validation - Study B" used in the 1998 and 1999 peaking calculations do not agree to the water deliveries to contractors included in the Table B-5A. We also noted that the 1999 report used 1998 entitlement amounts and that the annual entitlement for one contractor did not agree to Table B-4 on the 1998 report.

We anticipate that the Department will issue revised 1998 and 1999 FALPOCs in 2010. Power charges and credits are typically finalized in the Department's accounting system from the information included in the FALPOCs. The exceptions that we have noted above will affect the contractor's billings only if the amounts in the accounting system are adjusted to equal the amounts in the FALPOCs. We anticipate that the Department will revise the contractor billings for the power charges and credits included in the 1999 FALPOC when the final 1999 FALPOC is issued but the Department has not indicated whether 1998 will be corrected. We recommend that the Department update the contractor billings to reflect the correct 1998 and 1999 power costs and credits. We will determine whether corrections were made to the FALPOCs during our 2010 audit.

Power Revenues and Recovery Generation Credits

The Department sold approximately \$215,243,000 of energy during 2008 to various power utilities. The Department used these revenues to reduce the variable component by \$199,768,000 and the off-aqueduct minimum cost component by \$15,475,000.

Energy generated at the San Luis, Devil Canyon, Castaic, William E. Warne, Alamo and Mojave Siphon Powerplants was pooled with other energy sources to deliver requested entitlement water or it was sold. The value assigned to this energy totaled approximately \$49,369,000 in 2008. Also, LADWP paid \$582,500 to the Department in 2008 for interruption and curtailment of capacity as well as for peaking capacity foregone by the Department at the Castaic Powerplant.

The Department computes recovery generation by multiplying the kilowatt-hours of generation occurring at the recovery plant by a mill rate determined by using the higher of actual costs or a standard rate of 25 mills. This method is consistent with prior years. In 1986, the Alamo Powerplant began operations to service the East Branch. The Mojave Siphon Powerplant began operations during 1996. The costs associated with these Plants are recovered through charges to the water contractors for capital and operating costs. To determine the value of the power generated at the Alamo and Mojave Siphon

facilities and to credit contractors with amounts equal to the cost of power generated at these Plants, the Department computes a mill rate to apply to the generation, which considers the actual and estimated capital and operating costs of the Plants over the life of the Project.

In our prior year audit, we recalculated the recovery generation credits for San Luis, Castaic, Devil Canyon, Warne, Alamo and Mojave Siphon, noting that the credits included in the SAP system do agree to the 2006 PALPOC, understating the charge in SAP by \$5,158,000 and overstating the credit in SAP by \$5,158,000. During 2009, we verified that SAP was corrected to agree to the 2006 PALPOC. This error and the subsequent correction had no affect on contractor billings because SAP was not used to bill the variable charges.

In computing the Alamo and Mojave Siphon mill rates, estimates are required for future capital and operating costs. Each year, as these estimates are revised, a mill rate will be recomputed using revised costs and applied to the generation for that year. The Alamo mill rates used to calculate the recovery generation credits for 2008, 2009 and 2010 are 51 mills, 59 mills and 65 mills, respectively. The Mojave Siphon mill rates for 2008, 2009 and 2010 are 80 mills, 75 mills and 95 mills, respectively.

Our audit disclosed that the Department calculated the 2010 recovery generation credits for Alamo and Mojave Siphon using incorrect mill rates, understating the value of recovery generation for 2010 by \$1,072,000. As a result, Metropolitan's transportation variable component was overstated by \$15,000 and the transportation minimum component was understated by \$17,000 in the 2010 Statement of Charges. This error is expected to be corrected when the 2010 estimates are revised for the 2011 Statement of Charges.

Our prior year audit disclosed that the Department calculated the 2008 and 2009 recovery generation credits for Alamo and Mojave Siphon using incorrect mill rates, understanding the value of recovery generation for 2008 by \$4,999,000 and for 2009 by \$1,641,000. These errors were corrected when the Preliminary Power Allocation Memo for 2008 was issued and the 2009 estimates were revised for the 2010 Statement of Charges. As a result, Metropolitan's transportation variable component decreased by \$535,000, the transportation minimum component increased by \$477,000 and the Delta Water Charge minimum component increased by \$4,000 in the 2010 Statement of Charges.

The 2007 recovery generation amounts for Warne and Castaic are understated and the amounts for Alamo, Mojave Siphon and Devil Canyon are overstated, for a net understatement of \$293,000, in the variable component calculations due to the use of outdated amounts. As a result, Metropolitan's transportation variable component is understated by \$34,000 and the transportation minimum component is overstated by \$69,000 in the 2010 Statement of Charges.

We noted that the value of recovery generation for the Alamo Powerplant for 2002 was overstated by \$97,000 due to the use of an incorrect mill rate. The effect to Metropolitan is an understatement of the transportation variable component by \$1,000 and an overstatement of the transportation minimum component by \$2,000 in the 2010 Statement of Charges. This error is expected to be corrected when a Final Power Allocation Memo for 2002 is issued.

We noted that the credit included in the Delta Water Charge for the value of recovery generation for the San Luis Powerplant for 1999 was understated by \$170,000 due to the use of outdated information. This error results in the overstatement of Metropolitan's Delta Water Charge by \$6,000 in the 2010 Statement of Charges. This error is expected to be corrected when a Final Power Allocation Memo for 1999 is issued.

We noted that the value of recovery generation credits for the San Luis and Warner Powerplants for 1998 were understated by \$457,000 and \$14,000, respectively, and the Devil Canyon recovery generation was overstated by \$75,000, due to the use of outdated information in the 2010 Statement of Charges. The effect to Metropolitan is to overstate the transportation variable and understate the transportation minimum components by \$28,000 and \$6,000, respectively. Because of the difficulty in revising costs in SAP prior to 1999, the Department has indicated that they do not plan to make corrections for these errors. However, because of the significance of the various adjustments related to 1998 charges, we will propose that the Department make these corrections.

Beginning in the 1998 Statement of Charges, the Department assumed an initial operation date for the Mojave Siphon Powerplant of June 1996, because it represents the date that the Powerplant was capable of producing power. Metropolitan believes that a June 1997 operation date is more appropriate since the installation of the butterfly valves and the acoustic velocity flowmeters was completed in December 1996 and June 1997, respectively. The change of the initial operation date from 1996 to 1997 would result in a \$1,908,000 decrease in the 1996 and 1997 costs used to calculate the variable charges and a \$1,908,000 decrease in the recovery generation credits. The impact on Metropolitan's 2010 Statement of Charges would be a \$419,000 increase in the variable component and a \$74,000 decrease in the transportation minimum component. The revision in initial operation dates would also result in a minor amount of O&M costs for the Powerplant being capitalized. Negotiations between the parties continues on this and related issues.

Recovery of Certain Capital Costs Through Variable Charges

Devil Canyon Second Afterbay. Included in the 1992 through 2009 variable charges for all contractors are debt service costs attributable to the Devil Canyon Second Afterbay construction, which total approximately \$1.2 to \$5.7 million per year. These costs are considered power charges because they represent the cost to the SWP for system power benefits received from the Second Afterbay. These

charges and benefits are in addition to the charges and generation credits associated with the Devil Canyon Powerplant. Since these debt service costs are also collected from the four East Branch Enlargement (EBE) contractors in proportion to the enlargement capacity at Devil Canyon through the East Branch Enlargement component, the Department is returning these amounts collected from the EBE contractors in the following year.

We compared the Devil Canyon Second Afterbay charges for debt service included in the variable component to the debt service schedule. We noted discrepancies for 2004 through 2008 totaling \$113,000 due to the use of an outdated debt service schedule. As a result, Metropolitan's variable component in the 2010 Statement of Charges is understated by \$91,000. We informed the Department of these discrepancies and they plan to make the appropriate correction when final power allocations are prepared for these years and when the future amounts are adjusted for the 2011 Statement of Charges.

Coastal Branch facilities. The Department conducted a study in 1993 that concluded that by including extra off-peak capacity in the pipeline, pumping plants and storage tanks at the first reach of the Coastal Branch facilities, the power savings that would result would exceed the annual cost of financing the extra capacity. The Department is charging the incremental costs of this extra capacity to the variable component as a system power cost. Although the Department issued a FALPOC for 1998 using corrected amounts, the incremental costs included in the variable component calculation for 1998 remain understated by \$680,000, because SAP does not reflect the revision. As a result, Metropolitan's variable and minimum components in the 2010 Statement of Charges are understated by \$283,000 and \$29,000, respectively. This error is included in the energy and transmission cost error described on page 36. The Department does not expect to adjust SAP for this change.

In addition, we compared the Coastal Branch reach 33A costs included in the variable component to the Department's calculation of the Coastal Branch system power charges and noted the 2008 charges were overstated by \$1,154,000 because the Coastal Extension debt service amount of \$2,935,000 was used instead of the Coastal Branch reach 33A energy charge. As a result, Metropolitan's variable component in the 2010 Statement of Charges is overstated by \$923,000. The Department plans to make the appropriate correction in the 2011 Statement of Charges.

In last year's audit, we reported that the Department erroneously included the Coastal Branch Extension debt service amount of \$2,935,000 instead of the Coastal Branch Reach 33A charge of \$1,781,000 in the 2009 variable energy charges. For the 2010 Statement of Charges, the Department included the correct amount, resulting in a reduction to Metropolitan's 2009 transportation variable charge of \$923,000.

Tehachapi Afterbay. The Department has constructed an Afterbay at the Alamo Powerplant similar to the Devil Canyon Second Afterbay. The cost of the Tehachapi Afterbay is considered power charges because of the power benefits received from the Afterbay. We obtained the Department's calculation of the Tehachapi Afterbay debt service charges that are attributable to the power benefit and noted that the 2004 through 2008 charges were understated by \$939,000 in the 2010 Statement of Charges due to the use of an outdated debt service schedule that did not include WSRB Series AE. As a result, Metropolitan's variable component is understated by \$751,000. We have notified the Department of these differences so that the correct amounts can be included in the 2011 Statement of Charges.

In our prior year audit, we reported that the Department overstated the 2009 Tehachapi Afterbay debt service charge included in the variable component by \$1,038,000. The 2009 debt service amount was updated to the correct amount for the 2010 Statement of Charges, resulting in a decrease in Metropolitan's 2009 variable calculated component of \$830,000 in the 2010 Statement of Charges.

SPECIAL PRICED, UNSCHEDULED AND OTHER WATER DELIVERIES

In addition to the delivery of Table A water for use by Metropolitan and the other long-term water contractors, the SWP is also utilized to store, transfer and deliver water for other uses, such as Drought Water Bank, water rights permits, transfers of water among agencies, SWP loan water, recreation, fish and wildlife and unscheduled water that is available for a short period of time when excess water and SWP pumping capabilities are available in the Delta. SWP facilities are also used to transfer water acquired by agencies other than the Department under special agreements and this water is then transferred by or stored in SWP facilities. The Department bills the user the costs associated with the delivery of these special priced water transactions, and excludes these costs from the contractor billings for Table A water. Our testing of these special priced water transactions consists of ensuring that the charges for delivering special priced water were properly computed and that Metropolitan's billings for Table A water deliveries properly exclude the charges associated with such transactions.

Wheeling of Non-Entitlement Water

To avoid billing the water contractors for the costs of wheeling non-entitlement water, the Department must record credits in the cost accounting system or through the variable adjustments for fish loss. Each year we examine the Department's water delivery schedule to determine if there are any wheeling water deliveries that were not invoiced for which credits should be recorded in the cost accounting system. We examined the 2008 water delivery data and noted no deliveries for which an invoice had not been prepared. In addition to the water delivery schedule, we reviewed the invoices that the Department has prepared since our prior year audit for wheeling to non-contractors. During our examination of 2008 invoices for the wheeling of non-entitlement water, we noted one invoice for \$30,000 that was billed and collected but had not been credited to the contractors. This error results in an overstatement of \$1,000 and \$5,000, respectively, to Metropolitan's transportation capital and minimum components in the 2010 Statement of Charges. We will continue to monitor these invoices until credits are recorded for payments received.

In our prior year audit, we reported invoices totaling \$2,376,000 for 2004 and 2007 wheeling transactions were billed but were not collected and hence not credited to the contractors. These invoices have been credited to the cost accounting system, resulting in a decrease of \$86,000 and \$376,000, respectively, to Metropolitan's transportation capital and minimum components in the 2010 Statement of Charges.

We continue to monitor the status of the remaining 2004 wheeling transactions totaling 41,477 acre-feet that had not been billed in prior years because the contracts had not been finalized. In 2007, we noted that 33,722 acre-feet of the 2004 water totaling \$877,000 had been billed and collected, but had not yet been credited to the contractors. We noted that these invoices were credited to the cost accounting system during 2008 and are included in the error correction above. The remaining 7,766 acre-feet of 2004 water

had not been billed because the contracts were not finalized. The Department has finalized the contracts and will provide them to accounting staff so that they may be billed, paid and credited to the contractors in time for the 2011 Statement of Charges. The cost of these transactions, which we estimate to be \$230,000, not being credited to the cost accounting system, results in an overstatement of power costs allocated to the water contractors. The impact of these unbilled deliveries on Metropolitan's 2010 Statement of Charges is an overstatement of \$104,000 to the transportation minimum component. We will continue to monitor the situation to ensure that these deliveries are properly credited to the contractors.

DOWNSTREAM DISTRIBUTION OF COSTS

The Department's cost accounting system reallocates variable costs in accordance with where and how the water is utilized. Water utilization is categorized into the following water types: water supply deliveries, recreation deliveries, initial fill water, operational losses, reservoir storage changes and conservation water. Summaries of water through each plant by type are referred to as Water Tables. Water Tables are used to allocate variable costs to each water type using a process referred to as the downstream distribution of costs. This process also results in variable costs being reallocated to the transportation minimum and Delta Water Charge minimum components.

Because of difficulties encountered by the Department in developing the water table redistribution entries that reallocate costs between the minimum and variable components for water gains and losses and changes in reservoir storage in the SAP system, they did not begin using the system until the 2008 Statement of Charges, where the Department performed the downstream calculation using the SAP system for the first time for 2006. For the 2010 Statement of Charges, the Department reversed previously posted downstream activity for 1999 through 2007 that was based on manual calculations and then calculated the downstream redistribution entries within the SAP system. We recalculated the downstream distribution of costs for years 2001, 2006, 2007, and 2008 and compared our results to the redistribution entries in SAP and noted the following items:

- In our prior year audit, we reported that the Department's 2006 and 2007 downstream calculations did not contain the most current water quantities conveyed through each pumping plant and power recovery plant of project transportation facilities. In the current year, we determined that the 2006 and 2007 downstream distribution calculations correctly contained the water from the CARA water table, which we agreed to the water delivery information in Table B-6. As a result, Metropolitan's transportation minimum component decreased by \$5,256,000 and the Delta Water Charge minimum component increased by \$540,000 in the 2010 Statement of Charges.
- Although the Department calculated the downstream distribution in SAP, entries to record the affect of the downstream calculation were not made to SAP in time to be included in the 2010 Statement of Charges. As a result, the transportation minimum costs for 2006 through 2008 are understated by \$2,251,000 and the conservation minimum costs are understated by \$23,000. The impact of this error on Metropolitan's 2010 Statement of Charges is to understate the transportation minimum component by \$1,754,000 and understate the Delta Water Charge by \$1,000. While similar discrepancies likely occurred for 2001 to 2005, the impact in these years is believed to be immaterial.
- According to Bulletin 132, San Luis Reservoir is operated to conserve water for future delivery to downstream contractors. To account for costs associated with reservoir storage, the power costs

of Banks Pumping Plant that are allocated to the conveyance of annual conservation water quantities are transferred to the minimum OMP&R costs of San Luis Reservoir. During our testing, we determined that the program developed by the Department to compute the downstream distribution using the SAP system excluded initial fill water, operational losses, and net annual storage changes associated with the San Luis Reservoir and the portion of the California Aqueduct that is allocated to conservation. This change in methodology of excluding conservation water delivered through Banks from the downstream calculation for 1999 to 2008 understates the transportation variable and minimum costs by \$3,672,000 and \$3,413,000, respectively, and overstates the conservation minimum costs by \$6,964,000. The impact of this error on Metropolitan's 2010 Statement of Charges is to understate the variable component by \$2,938,000, understate the transportation minimum component by \$1,486,000 and overstate the Delta Water Charge by \$236,000. We discussed this issue with the Department and they indicated that they have modified the SAP downstream calculation to properly include conservation water.

- Although the Department is now utilizing the SAP system to calculate the downstream distribution, because the Department billed the variable component outside of the SAP system in the 2010 Statement of Charges for the years 2006, 2007 and 2008, the entries to record the downstream distribution of costs calculated by SAP were not included in the contractors' variable charges, as they were for the minimum component. We were unable to determine whether the Department prepared a manual calculation to reflect the downstream reallocation, in the amounts used for the Statement of Charges, although it appears there was some type of downstream reallocation because the costs in Table B-12 of Bulletin 132 were used to calculate the variable charges and these amounts differed from the costs in Table B-3. According to the introduction of the B tables, the difference between B-3 and B-12 costs is the effect of the downstream allocation of costs. As a result of the Department using some other method of calculating the downstream reallocation than what was calculated by SAP, variable costs for 2006, 2007 and 2008 are overstated by \$23,432,000, which overstates Metropolitan's variable component by \$18,745,000 in the 2010 Statement of Charges. In our VARIABLE AND MINIMUM ENERGY CHARGES section, we discuss the discrepancies we noted between variable costs in Table B-3 and Table B-12 of Bulletin 132-09 for 2006, 2007 and 2008.

Water Deliveries

In the prior year, we compared Metropolitan's water delivery data for 2007 to the Department's records and noted the Department reflected an additional 5,000 acre-feet of deliveries to Metropolitan in the San Joaquin Valley, when this amount should have been reflected as a credit of 5,000 acre-feet for water delivered from the San Joaquin Valley to Metropolitan's service area. This error has been corrected in the

2010 Statement of Charges. The effect of this correction is described in the VARIABLE AND MINIMUM ENERGY CHARGES section of this report.

In the current year, we compared Metropolitan's water delivery data for 2008 to the Department's records and noted no discrepancies.

Desert-Coachella Exchange Agreement

Metropolitan has an exchange agreement with Desert Water Agency (Desert) and Coachella Valley Water District (Coachella) whereby Metropolitan delivers Colorado River water to Desert and Coachella in exchange for Metropolitan taking delivery of Desert's and Coachella's State Water Project deliveries at reach 22B (Pearblossom Pumping Plant) of the California aqueduct. Beginning with the 1996 Statement of Charges, the Department revised the delivery point for these Desert and Coachella water deliveries to reach 26A (Devil Canyon Powerplant) effective January 1, 1993, instead of using an effective date of January 1, 1997. The change was made on the basis that Desert and Coachella had sufficient aqueduct capacity in the Devil Canyon Powerplant as of this date due to participation in the East Branch Enlargement. Metropolitan staff believes that the logical date for this change in delivery point is the date the three Mojave Siphon units were placed into service, which is August 1996. Negotiations between the parties continue on this and related issues. The effect of this revision in the timing of the delivery point results in an increase in Metropolitan's transportation variable component for 1993 through 1996 by approximately \$12,830,000.

Kern Water Bank Extraction

As a result of the Monterey Amendment, the Kern Water Bank (KWB) was transferred by the Department to Kern County Water Agency (Kern) and Dudley Ridge Water District (Dudley Ridge). The following exchanges have taken place since this transfer of ownership.

1997 Exchange At the time of the transfer, Kern and Dudley Ridge released 69,891 acre-feet of 1997 State Water Project allocated Table A entitlement back to the Department in exchange for the Department's 27,755 acre-feet of La Hacienda water and 27,136 acre-feet of 1990 Demonstration Program water in the KWB. Beginning in the 1999 Statement of Charges, the Department included \$2,550,000 in the Delta Water Rate calculation for the recovery of this 54,891 acre-feet of La Hacienda and Demonstration Program water, increasing Metropolitan's Delta Water Charge by \$70,000 in the 1999 and all future Statements of Charges. Since the cost to recover this water will not be fully recovered from the contractors until 2035, the Department borrowed \$2,550,000 from the Replacement Fund to pay for the recovery costs. The Replacement Fund is to be repaid as the amounts are collected in the Delta Water Charge. We verified that the Department has transferred the \$152,000 per year that has been collected in the Delta Water Charge to the Replacement Fund through 2008. The remaining balance to be collected is

\$2,321,000 plus interest. We will continue to monitor these transactions to ensure that any extractions from the KWB are accounted for correctly and that the Replacement Fund is properly reimbursed.

2008 Exchange The Department recovered 10,033 acre-feet of the 1990 Semitropic Ground Water Demonstration Project water by reducing Kern's Table A water entitlement for 2008 by 10,033 acre-feet, in exchange for Kern retaining 10,033 acre-feet of the Department's 1990 Demonstration Program water in the KWB. Kern was charged \$173,000 from the Delta to reach 10A for this water. Because all water contractors were charged to pump the 10,033 acre-feet into the KWB, system power costs should be reduced for the charges billed to Kern. We determined that the Department has not made this entry to reduce 2008 power costs, which results in an overstatement of Metropolitan's 2008 variable calculated component by \$138,000 in the 2010 Statement of Charges. The Department agrees this credit needs to be recorded but did not indicate when the amount would be reflected in SAP. After this exchange, 30,098 acre-feet of 1990 Demonstration water and 15,000 acre-feet of La Hacienda water remains in the KWB.

OFF-AQUEDUCT POWER FACILITIES

In 1983, Metropolitan signed the Off-Aqueduct Amendment to the water supply contract that provided for the construction of power facilities in addition to the SWP aqueduct facilities to meet the power needs of the SWP. These Powerplant facilities consist of Reid Gardner, a coal-fired plant and Bottlerock and South Geysers, both geothermal plants. However, only Reid Gardner is currently operating. The costs of these off-aqueduct facilities consist of debt service, O&M, fuel, general administration and transmission and are billed outside the existing cost accounting system. During our audit we verified the propriety of the billings for these costs.

Reporting the Computation of the Off-Aqueduct Minimum Cost Component

The Department should develop a method of reporting differences between estimated and actual costs as well as over- or underpayments made by Metropolitan in the annual Statement of Charges. This could be accomplished through the compilation of a document similar to Attachment 4 to the Statement of Charges.

Off-Aqueduct Amendment

The Department has encountered several issues in implementing the Off-Aqueduct Amendment. Metropolitan has aggressively pursued these issues with the Department, and final resolution is at the Director's level. A brief description of the open issues related to implementing the Amendment are as follows:

- Power Sales. It is the Department's policy to include all power sales in the variable cost component except those sales which specifically identify an off-aqueduct powerplant as the source. This procedure has resulted in very few power sales being returned under the off-aqueduct component and has caused the variable component to decrease to near zero and actually become negative at times. It has also resulted in unusual fluctuations in reimbursable costs when significant reservoir storage changes occur.
- Costs of Providing Services to Other Project Beneficiaries/Uses. Under the Off-Aqueduct Amendment, only contractors pay for the costs associated with the off-aqueduct power facilities. No costs are allocated to other purposes or uses such as recreation, flood control, station service, or water gains or losses. The energy produced by the off-aqueduct facilities is pooled with all other sources to meet the needs of the Project. This treatment results in off-aqueduct energy being used to deliver water for other nonwater supply purposes and uses while off-aqueduct costs are reimbursed entirely by the contractors.
- Interest on Over- and Underpayments between Contractors. At issue is whether Article 28 of the Water Supply Contract requires interest to be paid on over- and underpayments of off-aqueduct costs between contractors.

- Distribution of the 100% Bond Debt Reserve. The provisions of the indentures associated with bonds issued to finance construction of off-aqueduct facilities require a 100% bond debt reserve be maintained over the life of the issue (30 years). This reserve was funded in full by the contractors during 1983, 1984 and 1985. Each contractor's share was based on actual water deliveries made during that time. While this procedure is in conformity with the Amendment, some contractors believe it is inequitable and should give recognition to average deliveries made over a longer period of time. The Department's bond counsel has advised that a 100% bond debt reserve is no longer required. The Department is currently developing an allocation methodology to refund a portion of the bond debt reserve. We will audit the refund during next year's audit.

2008 Off-Aqueduct Costs

The Department prepared a Preliminary Year-End Allocation of 2008 Off-Aqueduct Power Facilities Charges in July 2009, which resulted in a reduction in costs of \$18,866,000. This reduction was primarily due to higher off-aqueduct power sales and lower O&M costs at Reid Gardner. In addition, water deliveries are lower than those used in the previous allocation. The Fiscal Services Office is currently preparing a reconciliation of the costs used in the study to the amounts in SAP and will issue a refund when the reconciliation is complete. Of the total off-aqueduct charges to be refunded of \$18,866,000, Metropolitan's share is \$17,278,000. We anticipate that the reconciliation will be completed and a refund issued by early 2010. These 2008 off-aqueduct charges will be adjusted further when the Department prepares the final year-end allocation of 2008 off-aqueduct costs.

2007 Off-Aqueduct Costs

In last year's audit, we noted the Department prepared a Preliminary Year-End Allocation of 2007 Off-Aqueduct Power Facilities Charges in August 2008, which resulted in a reduction in costs of \$29,276,000, but the Department had not issued refunds to the contractors. During 2009, the Department issued refunds to the contractors based on this study, of which Metropolitan's share was \$22,994,000. However, this study still includes a \$1.5 million estimate for future adjustments. In July 2009, the Department issued a revised study to remove the estimated amounts, and to add costs and power sales, which decreased costs by \$573,000, of which Metropolitan's share is \$510,000. These revised costs are reflected in Bulletin 132-09, Table B-16B even though a refund has not been issued. The Department plans to issue a revised study and related refund in early 2010. We will continue to monitor these 2007 off-aqueduct charges until they are finalized.

In verifying updated costs, we determined that the Department incorrectly included a 2006 property tax payment of \$201,000 in 2007 off-aqueduct costs that was also included in the 2006 off-aqueduct costs. This error resulted in Metropolitan's 2007 off-aqueduct power facilities charge to be overstated by \$147,000. We have notified the Department of this error so that the correction can be reflected in the next refund.

2006 Off-Aqueduct Costs

In our prior year audit, we disclosed that the Department had not issued a final year-end allocation of 2006 off-aqueduct costs even though a revised study was prepared, which indicated increased costs of \$1,221,000. The additional costs were billed to the contractors in April 2009, of which Metropolitan's share was \$873,000. The coal costs for 2006 are still not final and are subject to future revisions. We will continue to monitor these costs until they are finalized.

2002 and 2004 Off-Aqueduct Cost Adjustments

We noted that Metropolitan's 2002 and 2004 off-aqueduct costs reflected in Table B-16B of Bulletin 132-09 were overstated and understated by \$167,000 and \$36,000, respectively, related to cost adjustments made during 2007 that were not properly reflected. Since Table B-16B is not used to bill the off-aqueduct charges, these errors have no impact on Metropolitan's charges. However, we will recommend that the Department make these changes in Bulletin 132-10.

Allocation of Off-Aqueduct Costs

Metropolitan's share of off-aqueduct charges has fluctuated from a low of 46% in 1998 to a high of 84% in 1991. Metropolitan's allocation factor is expected to be 73% in 2008 and 67% in 2009 compared to 73% for 2007.

REPLACEMENT COSTS

In order to ensure continuing operation of the Project, the Department and the water contractors agreed to establish a reserve fund to provide for the contractors' portion of the cost of replacing significant Project facilities. The deposit amounts collected from the contractors are held by the State Controller on the contractors' behalf. However, since the implementation of the Pay-As-You-Go Replacement Accounting system (PAYGO) in late 1997, transportation facility replacement expenditures are now being billed as the expenditures are incurred, which are estimated and included in the Statement of Charges. Conservation replacement expenditures for the Hyatt-Thermalito Powerplant refurbishments are included in the net pumping costs and included in the variable charge. Conservation replacement expenditures for the Hyatt-Thermalito Powerplant and Gianelli Pumping and Generating Plant are generally being included in the Delta Water Charge calculation or are recovered from the conservation reserve account, except as indicated on the following pages.

Pay-As-You-Go Replacement Accounting System

Transportation Replacement Costs: As a result of concerns expressed by the state water contractors and their auditors, the Department implemented PAYGO for transportation replacement items effective with the 1999 Statement of Charges. This PAYGO system was designed to charge the contractors for replacement expenditures in the year they will be incurred, which should reduce the need for a large reserve balance. Under PAYGO, transportation facility replacement costs are estimated and included in the annual Statement of Charges as a separate line item on the transportation variable component invoice. These cost estimates are replaced with actual costs when they are known. The transportation portion of the Replacement Fund balance would be utilized on an interim basis when expenditures in a given year exceed the amounts collected from the contractors.

Upon the implementation of SAP, the Department revised its procedures for billing replacement expenditures whereby a factor is calculated representing each contractor's share of cumulative water through the plant for 20 or 30 years, as applicable, and the factor is applied to the estimated or actual costs to develop the replacement charge. The Department then calculates an over-/under-adjustment in SAP to update prior estimated costs to actual costs, which is included as a separate line item on the variable invoice. In the 2010 Statement of Charges, the Department included an adjustment to 2009 and prior charges of \$810,000, which is in addition to the estimated 2010 replacement charge of \$6,338,000.

During our audit, we examined the Department's calculation to allocate historical and estimated plant replacement costs to contractors based on water deliveries. We compared the replacement costs included in the computation to the amounts in SAP and noted that the Department's calculation does not reflect the most current historical cost information. Replacement costs used to calculate the variable replacement charges are overstated by \$471,000 for 2005 and 2006. In addition, we noted that although the

calculation allocating replacement system costs included the correct amounts for 2007 and 2008, when preparing the contractor's over-/under-adjustments in the Statement of Charges, these amounts were not used, resulting in an understatement of \$62,000. Also, for 2009, cost estimates for the Banks Pumping Plant were incorrectly allocated based on the water at the Buena Vista Pumping Plant. These errors result in a \$1,216,000 overstatement of Metropolitan's over/under adjustment on Attachment 5 and the transportation variable component in the 2010 Statement of Charges. We also reviewed the 2010 replacement cost estimates and noted that, as with 2009, the Banks Pumping Plant estimate was allocated based on water at the Buena Vista Pumping Plant, resulting in a \$213,000 overstatement of Metropolitan's transportation variable component in the 2010 Statement of Charges. We have informed the Department of these discrepancies and expect that the information will be updated when the calculation is prepared for the 2011 Statement of Charges.

We noted that Metropolitan's and other contractors' water delivery information used in the calculation was accurate when compared to that included in Bulletin 132-09, Table B-5A.

Conservation Replacement Costs: Upon the implementation of PAYGO in 1997, the conservation portion of the Replacement Fund had a balance of \$12 million, including \$7 million for Oroville. The decision was made to pay conservation facility replacement costs out of the conservation portion of the Replacement Fund until the entire balance was expended in 2002. The SWC PAYGO Workgroup met in 2003 and developed a methodology for recovering conservation replacement costs that entailed preparing a separate Delta Water Rate for replacements using estimates of replacement expenditures and projecting this amount out through 2035 so as to collect the entire amount of the conservation replacement expenditures in one year. The cost estimates would be adjusted to actual amounts two years later. This procedure was considered to be temporary until a contract amendment could be executed whereby all conservation facility O&M costs would be repaid on a pay-as-you-go basis.

The Department had initially included the costs of refurbishing the Hyatt-Thermalito Powerplant turbines, which are identified as a replacement item, in the calculation of the conservation replacement rate. Because of the extensiveness of the work, Metropolitan and other contractors raised the issue with the Department that the work is more than a routine replacement, and thus should not be included entirely in the conservation replacement charge. The Department determined that they could not issue bonds for Units 1, 3 and 5 due to the timing of the expenditures, but bonds would be issued for Units 2, 4 and 6. Since these pumps and turbines are allocable entirely to the power purpose, Metropolitan believed and the Department concurred that costs for all units should be billed through the variable component. The costs for turbine replacement are included in the Delta Water Charge along with a credit for the same amount, which is consistent with the treatment for other Hyatt-Thermalito O&M costs. The variable component includes actual costs for Units 1, 3 and 5 and debt service costs for Units 2, 4 and 6.

During our testing of the 2010 Delta Water Charge, we noted that the Department had reclassified approximately \$6.1 million of Unit 1, 3 and 5 refurbishment costs to a Delta reach that was included in the computation of the Delta Water Charge; however, the Department did not include a credit to offset these charges, resulting in the double billing of these costs, since they are now being billed through the variable component. The exclusion of the credit results in an overstatement to Metropolitan's Delta Water Charge by \$257,000 in the 2010 Statement of Charges. The Department is aware of this error and is working to include a credit in the 2011 Delta Water Charge.

After adjusting the variable component for Units 1, 3 and 5 historical refurbishment costs in the 2007 Statement of Charges, an additional \$1,241,000 of refurbishment costs were incorrectly allocated to the Thermalito Power Features reach, and thus were incorrectly excluded from the variable component. We have verified that these costs are related to the refurbishment and should be included in the variable component. The exclusion of the refurbishment costs at Thermalito from the variable component results in an understatement of \$993,000 in Metropolitan's 2010 Statement of Charges. The Department will reflect the change in the 2011 Statement of Charges.

The 2010 Statement of Charges includes scheduled debt service costs for Units 2, 4, and 6 of \$1,259,000 for 2009 and \$1,304,000 for 2010 through 2029 as a result of the issuance of Series AE WSRB in 2008. The debt service schedule used in the 2010 Statement of Charges is based on total costs for Units 2, 4 and 6 of \$16.9 million. However, we determined the total costs in SAP were \$18.6 million. We inquired of the Department as to the cause of this difference but received no response. We expect that the future annual debt service will increase to account for this difference, which will result in an increase in the variable component. In addition, since a credit is included in the Delta Water Charge based on the \$16.9 million instead of the \$18.6 million, Metropolitan's 2010 Delta Water Charge is overstated by \$56,000.

When the Department calculated the conservation replacement Delta Water Rate for the 2004 to 2006 Statements of Charges, they included only Oroville replacement cost estimates and not other conservation replacement costs. The Department believes that a billing mechanism for other conservation replacement charges was not discussed by the Work Group that met in 2003. The Department incurred replacement costs of \$857,000 through 2008 at Gianelli Pumping and Generating Plant that should be deducted from the conservation replacement reserve fund, until the fund is depleted, at which time, a methodology should be developed for billing these costs. However, we determined in the following paragraph that a portion of these costs were incorrectly included in the Delta Water Charge. In addition, the replacement costs for the Banks Pumping Plant are being allocated entirely to the transportation component instead of being partially allocated to the conservation component and deducted from the conservation replacement reserve fund. We will monitor these situations to ensure the amounts are recovered correctly in the future.

Due to the incorrect coding of cost centers, actual replacement costs totaling \$167,000 for the Gianelli Pumping and Generating Plant have been improperly included in the 2010 Delta Water Charge, instead of being paid from the Replacement Fund, which results in the overstatement of Metropolitan's 2010 Delta Water Charge by \$8,000. We will work with the Department to ensure this item is corrected during the preparation of the 2011 Statement of Charges.

Replacement Costs

We noted an increase in the allocation of indirect costs starting in 2006 due to revisions to the methodology of allocating indirect costs. A total of \$2,084,000 in indirect costs have been charged to replacement cost centers, compared to \$15,124,000 of direct costs. It is unclear whether overhead amounts should be allocated to replacement cost centers. We have inquired of the Department whether overhead amounts should be allocated to a replacement cost center but the Department has not responded. We will continue to monitor this issue.

Replacement Fund Reduction

Under the previous Replacement Accounting System (RAS) methodology, the Department established a target balance in the Replacement Fund of \$20 million to \$40 million. Due to concerns raised by contractors and auditors of the need to maintain these large balances, the PAYGO program addressed the level of the Replacement Fund that would be needed. The PAYGO provides for a target balance of \$20 million for transportation replacements, with possibly a gradually lower level, subject to review by the Department and SWC representatives on an annual basis. This review of the Fund balance has not been performed for several years.

The Department prepared a reconciliation of the replacement reserve fund and cash balances in the general ledger to the State Controller's cash balance as of June 30, 2009. The Replacement Fund cash balance at June 30, 2009, as reported by the State Controller, was \$35.9 million. The reserve account had a balance of \$37.0 million at June 30, 2009, which includes \$27.1 million for transportation and \$9.9 million for conservation. The difference between the State Controller cash balance and the reserve account balance of \$1.1 million is made up of the following items. The cash balance is lower than the reserve account balance by \$2.3 million due to a loan from the Replacement Fund to pay for water extractions from the Kern Water Bank. In addition, transactions totaling \$3.6 million for deposit and expenditure activity have not yet been reflected in the State Controller balance, which will reduce the balance by \$3.6 million. These amounts are offset by \$5.0 million that was transferred to the conservation replacement fund from the system revenue fund in 2004, which the Department plans to transfer back to system revenue in 2009.

At June 30, 2008, the conservation portion of the Replacement Fund had a negative balance of \$4.9 million, which was due to the Hyatt-Thermalito refurbishment costs that were deducted from the

Replacement Fund when they were removed from the Delta Water Charge in the 2007 revised Statement of Charges. The Fiscal Services Office indicated that these amounts will be returned to the Replacement Fund when they verify that the amounts have been collected through the variable component. The Department prepared the analysis of amounts collected through the variable component this past year and has adjusted the Fund to the proper balance. Accordingly, at June 30, 2009, the conservation replacement fund balance was at \$9.9 million. We recommend that the Department refund a portion of the \$9.9 million conservation fund balance now that the Hyatt-Thermalito refurbishment costs are billed and collected through the variable component.

FUTURE COSTS

In Attachment 3 to the Statement of Charges, the Department summarizes by year all past and future estimated payments to be made by Metropolitan over the life of the Project. Approximately 80% of the costs billed in Metropolitan's 2010 Statement of Charges represent estimated future costs and are based on assumptions made by the Department regarding future operation of the Project. Therefore, it is essential these assumptions be identified and properly reflected in the 2010 Statement of Charges, as they have a significant impact on Metropolitan's cash flow. Since Metropolitan uses future costs shown in this Attachment in its long-range financial planning, it is important that estimated costs be based on the best information available at the time the Statement of Charges is issued.

Upon converting to the SAP system, the Department began using the budgeted amounts contained within SAP as the basis for the future cost estimates in the 2003 Statement of Charges. However, using these budget amounts, the O&M future cost estimates were determined to be unusually high compared to previous Statements of Charges and were substantially higher than the prior year actual amounts. Instead of changing the budgeting process so that projected O&M costs in SAP could be utilized for the Statement of Charges, the Department develops O&M future cost estimates outside of the SAP system using an average of the actual costs for the past three years, adjusted for escalation plus any known new projects. The Department used an escalation factor of 5% for both the 2009 and 2010 Statements of Charges. This escalation factor is used to estimate O&M costs for 2010 and 2011 in the 2010 Statement of Charges. For 2012 through 2035 estimates used in the Delta Water Charges, an escalation factor of 1% is applied to the average of 2009 to 2011 estimates, except for the Delta facilities costs, where no escalation factor is used for 2012 to 2035. Metropolitan believes that this approach is a reasonable method for developing future cost estimates.

We noted that the Department used an escalation factor of 5% for the 2010 Statement of Charges, even though the criteria memo issued by the Department in March 2009 indicated an escalation factor of 4% should have been applied to 2009 costs and 2.5% to 2010 costs. The Department will be adjusting the escalation factors in the December 2009 revision of the 2010 Statement of Charges to the factors stated in the criteria memo.

As part of our review of future costs, we studied memorandums, interdepartmental correspondence, various computer-generated reports and spreadsheets used by the Department to develop future cost estimates in order to identify significant changes in assumptions used to estimate future costs. On the following pages we highlight significant changes between the 2009 Statement of Charges and the 2010 Statements of Charges.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
COMPARISON OF THE 2009 AND 2010 STATEMENTS OF CHARGES
(IN MILLIONS)

	Transportation Charge Off-			Delta Water Charge		East Branch Enlargement		Water System Revenue Bonds	
	Capital	Minimum	Aqueduct Minimum	Variable	Capital	Minimum	Capital	Minimum	Total
2009 Statement of Charges dated December 24, 2008	\$ 53.7	\$ 127.1	\$ 95.8	\$ 243.5	\$ 24.9	\$ 33.3	\$ 30.3	\$ 7.0	\$ 36.5 \$ 652.1
Increase (decrease) due to changes in:									
Estimated costs	0.8	5.3	(4.3)	(62.7)	0.2	19.8		(0.4)	(41.3)
Past cost adjustments	0.2	7.6		16.9	(0.1)		0.2	(1.4)	23.4
Change in debt service	18.7		1.8				(0.4)	(1.4)	18.7
Recovery generation				1.1		(6.1)			(5.0)
Allocations among contractors			(0.5)	3.3					2.8
NET CHANGE	19.7	12.9	(3.0)	(41.4)	0.1	13.7	(0.2)	(1.8)	(1.4)
2010 Statement of Charges dated July 1, 2009	\$ 73.4	\$ 140.0	\$ 92.8	\$ 202.1	\$ 25.0	\$ 47.0	\$ 30.1	\$ 5.2	\$ 35.1 \$ 650.7

Note: The transportation capital and minimum charges include charges relating to the Devil Canyon-Castaic Contract.

Comparison of the 2009 and 2010 Statements of Charges

As shown on the previous page, Metropolitan's 2010 charges decreased by \$1.4 million compared to the December rebill of the 2009 Statement of Charges. The more significant of these changes are the result of the following items:

TRANSPORTATION CAPITAL: The increase of \$19.7 million in the transportation capital component is primarily due to the following:

Decrease in WSRB Debt Service Reserve Credit: \$ 18.7 million

The decrease in the transportation capital component was largely due to no debt service reserve credits being included in the 2010 Statement of Charges, whereas \$18.7 million of debt service reserve credits were included in the rebill of the 2009 Statement of Charges.

Change in debt service costs: 0.2 million

The debt service costs for Tehachapi Second Afterbay and Devil Canyon Castaic increased from 2009 to 2010.

Changes in cost estimates: 0.8 million

The most significant change was caused by the removal of Perris Dam remediation costs as a result of them being reallocated to the recreation Project purpose.

TOTAL CHANGE IN TRANSPORTATION CAPITAL COMPONENT **\$ 19.7 million**

TRANSPORTATION MINIMUM: The increase in the transportation minimum component of \$12.9 million is the result of a \$5.3 million increase in cost estimates and a \$7.6 million increase in the past cost adjustment. The net increase is due primarily to the following increases and decreases:

Changes in estimated costs:

Increase in operations control system cost estimates for 2009 and 2010 \$9.1 million

The Department's estimate for 2009 and 2010 for operations control systems in the 2010 Statement of Charges increased by \$12.1 million related primarily to the following:

Control system remote terminal unit replacement project cost increases	\$5.1 million
CAISO electricity market initiatives and transmission system redesign cost increases	2.8 million
Cyber-Security Infrastructure Protection compliance cost increases	2.2 million
Increased cost estimates for Project Operations Center and plant SCADA system	1.1 million
Centralized Control System Migration miscellaneous cost increases	1.6 million

The total estimated costs for operations control systems through calendar year 2011 is \$56.8 million, which consists primarily of \$18.6 million to replace the remote terminal units for the aqueduct control system, \$18 million for anticipated additional costs expected as a result of electricity market initiatives affecting the California Independent Systems Operator and their redesign of the operation of the transmission system and the movement of wholesale power in California, \$9.4 million for upgrades to the Project Operation Center and plant SCADA systems, and \$7.5 million for the Cyber-Security Infrastructure Protection program to ensure compliance with Western Electricity Coordinating Council standards.

Revision of 2009 and 2010 estimated water gains and losses and reservoir storage changes 5.0 million

The Department's estimate of water gains and losses and reservoir changes for 2009 and 2010 increased by \$5.2 million due primarily to significant changes in storage assumptions at Lakes Castaic and Perris. The Department estimated the reservoir levels for Castaic would increase by 39,000 acre-feet for 2009, resulting in a \$4.6 million increase, and Perris would decrease by 8,000 acre-feet, resulting in a \$0.8 million decrease. In addition, for 2010, the Department estimated reservoir levels for Perris would increase by 12,000 acre-feet, resulting in a \$1.2 million increase.

Increased costs for the Delta Habitat Conservation and Conveyance Program 3.1 million

Delta Habitat Conservation and Conveyance Program costs increased from \$27.2 million in 2009 to \$33.7 million in 2010.

Increase in estimated 2009 and 2010 costs for major O&M activities 2.8 million

The Department increased the 2009 and 2010 estimates for planned major O&M activities in the 2010 Statement of Charges by \$1.9 million for the entire Project. The net increase in estimates relates to the following activities:

Delta Field Division:

Addition of cost estimates to renovate the O&M substation and 13.8 kilovolt feeder in 2009.	\$ 1.0 million
Addition of cost estimates to replace the roof on the O&M center, which is scheduled to begin in 2010.	0.8 million
Addition of cost estimates to seal and pave aqueduct roads in 2009.	0.6 million

San Luis Field Division:

Addition of cost estimates in 2009 and 2010 to repair San Luis canal subsistence damage.	2.2 million
Addition of cost estimates to replace fire alarm system and shop hoists.	0.4 million
Decrease in cost estimates to re-roof the San Luis O&M Center.	(0.9 million)
Decrease in cost estimates for aqueduct liner repairs for reaches 3 and 7 as most of the work was completed in 2008.	(0.9 million)
Decrease in cost estimates to seal the aqueduct roads as this work is being spread out over a longer period of time.	(2.3 million)
Decrease in cost estimates for the seismic retrofit of bridges as most of the work was completed in 2008.	(2.6 million)
Removal of cost estimates for the replacement of the trashrake system at Dos Amigos Pumping Plant.	(3.7 million)

San Joaquin Field Division:

Addition of cost estimates for various roofing contracts at plants and O&M centers.	2.4 million
Addition of cost estimates to seal and pave roads at various San Joaquin pumping plants.	1.7 million
Addition of estimated costs for the overhaul of Teerink Pumping Plant Units 1, 7 and 8.	1.4 million
Addition of estimated costs for the overhaul of Buena Vista Pumping Plant Units 1, 2, 4, 9 and 10.	1.4 million
Addition of cost estimates for the overhaul of Edmonston Pumping Plant Unit 7 of \$0.5 million and replacement of seven discharge valve seats in the east wing for \$0.8 million.	1.3 million
Addition of cost estimates to replace septic tanks at pumping plants.	0.5 million

Southern Field Division:

Addition of cost estimates for the Cedar Springs Dam Tunnel conduit replacement.	1.7 million
Increase in the estimated costs for pump casing refurbishment on Units 2 and 3 at Pearblossom Pumping Plant.	1.3 million
Increase in the estimated costs to seal and pave roads.	0.5 million
Addition of cost estimates in 2009 for the replacement of the trashrake system at check 66.	0.5 million
Decrease in the estimated costs to replace the turbine shut-off valve on Devil Canyon Unit 2 due to the completion of the project.	(2.4 million)
Decrease in the estimated costs for turbine needle refurbishment in Units 1 and 2 of the Warne Powerplant as a result of most of the work being completed in 2009.	(3.5 million)

Total estimated costs for Project-wide future major O&M activities through the first half of calendar year 2012 is \$65.2 million. Some of the more significant projects include:

\$7.6 million for sealing and paving roads in the Southern Field Division

\$5.9 million for San Luis Canal subsidence damage repair

\$4.7 million for roof replacement at several facilities located within the San Joaquin Field Division including Buena Vista, Teerink, Chrisman, Edmonston, Las Perillas, Badger Hill Pumping Plants

\$4.2 million to seal coat aqueduct roads in the San Luis Field Division

\$4.2 million to overhaul Units 1, 4, 7, 8 and 9 at the Chrisman Pumping Plant

\$3.9 million to replace the seven discharge valves and overhaul units 7, 12 and 14 at the Edmonston Pumping Plant

\$3.5 million to repair aqueduct liner at mile post 14.85

\$3.1 million for pump casing refurbishment for Units 1 and 2 at Pearblossom Pumping Plant

\$2.5 million for refurbishment of the turbine needle at Warne Powerplant

\$2.5 million to overhaul Units 1, 4, 7, 8 and 9 at the Teerink Pumping Plant

\$2.4 million for aqueduct liner repairs in the San Luis Field Division

\$2.4 million to overhaul Units 1, 2 4, 9 and 10 at the Buena Vista Pumping Plant

\$2.4 million for seismic retrofit of bridges in the San Luis Field Division

\$2.2 million for sealing and paving roads in the San Joaquin Field Division

\$2.2 million to seal and pave roads in the Delta Field Division

\$1.7 million for Cedar Springs Dam tunnel conduit replacement

\$1.5 million for roof replacement at the Delta Field Division Operation and Maintenance Center

\$1.5 million for aqueduct liner repair at mile post 62

\$1.2 million to re-roof the San Luis Operation and Maintenance Center

\$1.1 million for seepage repair at mile post 88.3 to 89.50

Inclusion of Bay Delta Extraordinary Costs

1.0 million

The Department included a total of \$3.7 million of estimated costs for 2009 and 2010 for Delta fish facility improvement projects and for fishery survival improvements under the 2004, 2009 National Oceanic and Atmospheric Administration Operation Criteria and Planning Biological Opinion in the 2010 Statement of Charges. No similar amounts were included in the 2009 Statement of Charges.

Inclusion of Division of Environmental Services extraordinary costs

0.6 million

The Department included estimated costs for consultants for salmon and smelt CESA and CEQA compliance for \$0.5 million and \$2 million for Bay-Delta Protection Study-related costs for 2010 in the 2010 Statement of Charges. No similar amounts were included in the 2009 Statement of Charges.

Revisions to 2009 and 2010 Municipal Water Quality Investigation program costs

(0.3 million)

Reduction in Bay Delta Conservation Plan Costs

(0.7 million)

The Department collected \$7.5 million from 2007 to 2009 for the Bay Delta Conservation Plan, so no additional amounts were included in the 2010 Statement of Charges.

Reduction of estimated planning cost for the Lodi Powerplant

(2.5 million)

The Department included \$2 million for 2009 in the 2009 Statement of Charges, while no estimated costs were included for either 2009 or 2010 in the 2010 Statement of Charges.

Change in State Government charges

(2.9 million)

The Department's 2009 and 2010 estimated State Government charges from other State agencies decreased by \$5 million from amounts previously estimated.

These decreases are partially offset by an increase due to the following:

Updated O&M cost estimates for 2009 and 2010

(9.9 million)

Cost estimates for 2009 and 2010 decreased by \$11.5 million as a result of the following:

O&M costs were reduced by 5% in response to contractor requests. \$ (8.6 million)

Salary costs for 2009 and half of 2010 were reduced by 3.31% due to State-mandated furloughs of Department employees. (6.3 million)

These decreases are partially offset by an increase due to the following:

Updating O&M cost estimates using the average of 2006 to 2008 historical cost information. 3.4 million

Total change in estimated costs 5.3 million

Change in past cost adjustments:

Adjustments of 2008 costs from estimates to actual 9.5 million

Transportation minimum costs incurred for 2008 were greater than the amounts estimated in the 2009 Statement of Charges.

Inclusion of Operating Equipment Purchases for 2007 and 2008 2.6 million

Due to a programming error, the Department did not include operating equipment purchased during fiscal year 2008 in the 2009 Statement of Charges. Manual entries were made to reflect these purchases totaling \$4 million in the 2010 Statement of Charges.

Impact of additional year of interest on the prior over and underpayments 2.0 million

Revisions to 2007 and 2008 MWQI program costs 0.2 million

Update of water gains and losses and reservoir storage changes from 1999 to 2008 0.1 million

The Department revised all downstream calculations of water gains and losses and reservoir storage changes from 1999 to 2007 and also updated 2008 amounts from estimates to actual. The Department updated 1999 to 2007 downstream calculations to reflect correct water quantities conveyed through each pumping and power recovery plant. While some years increased and others decreased, the net change resulted in a \$5.3 million increase in Metropolitan's minimum component. Downstream minimum costs for 2008 decreased due to actual water data used for the 2010 Statement of Charges reflected additional decreases in reservoir storage than previously estimated, resulting in a \$5.2 million decrease to Metropolitan's minimum component.

Update of 2008 transmission costs to actual (2.0 million)

Revisions to 2008 and prior costs (4.8 million)

The 2009 Statement of Charges included a \$4.8 million overpayment due to revisions on Attachment 4B, which causes a decrease when compared to the 2010 Statement of Charges.

Total change in past cost adjustments 7.6 million

TOTAL CHANGE IN TRANSPORTATION MINIMUM COMPONENT \$ 12.9 million

OFF-AQUEDUCT MINIMUM: The \$3.0 million decrease in Metropolitan’s off-aqueduct minimum component is due primarily to the following:

Change in debt service costs: \$ 1.8 million

Scheduled debt service costs increased by \$2.7 million between 2009 and 2010, which is due primarily to the issuance of Series AF Water System Revenue Bonds in March 2009.

Allocations among contractors: (0.5 million)

Increases in other Southern California contractor water deliveries of 36,350 acre-feet resulted in a decrease in costs allocated to Metropolitan of \$0.5 million, even though Metropolitan’s requested water deliveries did not change from 2009 to 2010.

Change in estimated costs:

Decreased coal costs (7.4 million)

Coal costs at Reid Gardner decreased by \$11 million due to an \$11.58 per-ton decrease in the price of coal and also a decrease in estimated usage from 770,000 tons to 731,500 tons.

Increased transmission costs 3.1 million

Transmission costs increased \$4.6 million due to a rate methodology change from point to point transmission service to a network-wide transmission service within Southern California Edison’s transmission service area as a result of the settlement of a transmission rate case. This change in transmission service resulted in a quadrupling of transmission fees.

TOTAL CHANGE IN OFF-AQUEDUCT MINIMUM COMPONENT \$ (3.0 million)

TRANSPORTATION VARIABLE: The variable component decreased by \$41.4 million between 2009 and 2010. This decrease results from the following:

Changes in estimated costs: \$ (34.8 million)

Decreased net power cost estimates for 2010

The decrease in the Department’s net power costs consists of the following:

Decrease due to prior year charges that were based on reduced delivery amounts	\$(94.6 million)
Increase in power costs	13.7 million
Decrease in power sales	15.0 million
Increase in transmission costs	7.0 million
Increase due to contingency for energy market redesign costs	10.3 million
Increase due to contingency for payment lag	10.0 million
	<hr/> (38.6 million)

- In determining the variable charges for 2009, the Department prepared the power cost study assuming the delivery of 2.05 million acre-feet of water. This mill rate was then applied to contractor delivery requests of 3.68 million acre-feet, resulting in an increase in variable charges of \$94.6 million compared to the amounts determined by the study. The 2010 mill rate was based on 3.35 million acre-feet, which was closer to the requested deliveries of 3.7 million acre-feet; thus, the large increase in variable charges did not occur for 2010.
- The following changes in assumptions contributed to the \$13.7 million increase in power costs between 2009 and 2010:
 - ◆ Increase of \$35.3 million in the cost of recovery generation at State Water Project facilities due to a 1.2 million megawatt-hour increase in anticipated power generation as a result of the higher water delivery assumption used in the 2010 power cost study.
 - ◆ Increase of \$7 million in Hyatt-Thermalito costs due to an increase in megawatt hours generated of 271,000 and a \$6.4 million increase in O&M costs.
 - ◆ Increase of \$5.5 million due to a reduction in pumping costs allocated to San Luis, which are reassigned to the Delta Water Charge. The reduced pumping costs are the result of the need for less energy because of the decrease in water through the plant from 789,500 acre-feet for 2009 to 354,000 acre-feet for 2010 in addition to a decrease in the melded rate from \$43 to \$36.
 - ◆ Decrease of \$2.5 million in intermediate-term power purchases due to a decrease in the estimated mill rate of these energy purchases from 84 mills per kilowatt-hour to 45 mills. This decrease was partially offset by an increase in estimated energy purchases of 1.6 million megawatt-hours as a result of the power cost study for 2010 being based on 3.35 million acre-feet, compared to the 2.05 million acre-feet used in 2009.
 - ◆ Decrease in Devil Canyon Second Afterbay debt service and Coastal Branch power costs of \$1.0 million and \$1.2 million, respectively, compared to 2009.
 - ◆ Decrease of \$28.5 million in long-term energy purchases as a result of a decrease in the estimated mill rate from 72 mills per kilowatt-hour in 2009 to 54 mills in 2010.
- Power sales decreased \$15 million between 2009 and 2010 as a result of a decrease in the estimated average mill rate from the sale of power from 101 mills per kilowatt-hour in 2009 to 58 mills per kilowatt-hour in 2010. This decrease was partially offset by a 446,000 megawatt-hour increase in estimated energy available for sale.
- Transmission costs increased \$7 million due to a 2.6 million megawatt-hour increase in energy as a result of deliveries increasing from 2.05 million acre-feet to 3.35 million acre-feet.

- The CAISO implemented its Market Redesign and Technology Upgrade in April 2009, which changes the way energy is scheduled and settled and which caused some uncertainty with respect of the operation of the power contracts and the Department's remittance procedures. To address this uncertainty, the Department added \$10.3 million to the 2010 power costs. In addition, \$10.0 million was added to absorb timing issues related to variable billing and collections from the contractors that affect the Department's cash flow.

Differences between energy study and variable charges

(25.9 million)

Historically, the variable charges have been calculated using energy cost data in Table B-3 of Bulletin 132, which are supported by the energy study where power resources and sales are determined. For the last three years, the plant costs in Table B-12 of Bulletin 132 were used to calculate the unit rates instead of those in Table B-3. In our comparison of the 2009 and 2010 Statements of Charges, we noted that B-12 was greater than B-3 by \$29.2 million for 2009 and less than B-3 by \$9.4 million for 2010. Because the energy study is used for analyzing changes between Statements of Charges but the amounts in B-12 were used to calculate the variable billings, there is a \$38.6 million decrease in net power costs in addition to the decrease in estimated net power costs of \$38.6 million discussed above. Metropolitan's share of this decrease is estimated to be \$25.9 million. According to the introductory section of the B Tables, the difference between Table B-12 and Table B-3 is the affect of the downstream allocation of costs for water gains, losses and storage changes; however, this does not appear to be the cause of the entire difference. The Department has not been able to provide an explanation as to why these two tables contain inconsistent data. Our comparison of the difference between B-3 and B-12 and the downstream amounts calculated in the SAP CARA system result in an error which is discussed on page 50.

Decrease in replacement costs:

(2.0 million)

Metropolitan's variable component decreased by \$2.0 million due to the reduction of the equipment replacement charge for 2010 and the adjustment to update estimated replacement costs for 2009.

Total change in estimated costs

(62.7 million)

Changes in the past cost adjustment:

Revision of 2008 from estimated to actual power costs

(4.1 million)

Metropolitan's 2008 variable charges decreased by \$4.1 million, primarily as a result of replacing estimated cost and payment amounts with actual cost and payment amounts. Metropolitan's 2008 payment amount was adjusted to actual, which reduced the payment amount by \$120.8 million and the 2008 calculated component decreased \$124.9 million, resulting in a net decrease of \$4.1 million in 2008 variable charges. The decrease in the calculated component of \$124.9 million is due primarily to Metropolitan's actual water deliveries for 2008 being 1,047,761 acre-feet less than the amount estimated in the prior year, which reduced the calculated component by \$114.3 million. In addition, the variable unit rates decreased for 2008 as a result of a reduction in the amount of energy required by the pumping plants of 2,658,000 megawatt-hours, which caused a \$20.6 million decrease in power costs and an \$88.1 million increase in power sales.

<u>Revision of 2009 estimated power costs</u>	21.4 million
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The 2009 Charges included a \$21.4 million overpayment due to revisions to the 2008 and prior costs, which caused an increase of this amount when compared to the 2010 Statement of Charges.

<u>Additional year of interest in calculation of overpayment on Attachment 4C</u>	<u>(0.4 million)</u>
Total change in past cost adjustments	<u>16.9 million</u>

<u>Changes in recovery generation credits:</u>	1.1 million
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Metropolitan's share of the recovery generation credits decreased by \$1.1 million because of decreased deliveries to Metropolitan on the East Branch from 903,477 in 2009 to 758,998 in 2010, which decreased Metropolitan's share of the recovery generation credits at Mojave Siphon and Devil Canyon Powerplants. In addition, recovery generation at Mojave Siphon decreased because the recovery generation credit was based on 605,747 acre-feet instead of the 1,226,617 acre-feet of deliveries shown in Table B-5A. These decreases were partially offset by an increase of 189,852 acre-feet of deliveries through the West Branch, which increased Metropolitan's share of the recovery generation credits from Warne and Castaic Powerplants.

Changes in allocations among contractors:

<u>Metropolitan's water deliveries were shifted to the West Branch</u>	3.3 million
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The major factor contributing to the increase in Metropolitan's share of energy costs is the shift of 45,373 acre-feet of Metropolitan's deliveries from Semitropic storage north of the Tehachapis to the West Branch, which increased Metropolitan's variable charges by \$6.0 million. This increase was partially offset by a decrease due to deliveries of 144,479 acre-feet being shifted from the East Branch to the West Branch, which has a lower unit cost, decreasing Metropolitan's charges by \$2.7 million. Metropolitan's water deliveries for 2010 remained the same at 1,711,500 acre-feet, compared to other contractors decreasing their water deliveries by 14,701 acre-feet, which also contributed to the increase in Metropolitan's charges.

TOTAL CHANGE IN TRANSPORTATION VARIABLE COMPONENT	<u>\$(41.4 million)</u>
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DELTA WATER CHARGE MINIMUM: The increase of \$13.7 million in the Delta Water Charge minimum component is primarily due to the following:

Changes in estimated costs:

<u>Increased O&M cost estimates for 2012 to 2035</u>	\$18.4 million
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The Department increased the cost projections for 2012 to 2035 related to the Oroville, Delta and the San Luis facilities by \$1.135 million because of concerns raised by the contractors that the estimates for these years are understated because they do not include extraordinary O&M costs.

Updated O&M cost estimates for 2009 through 2010

0.6 million

O&M costs used in the Delta Water Charge increased by \$22.5 million due to the following:

O&M cost estimates for 2009 through 2011 increased as a result of a \$34.4 million increase in the average of historical costs for the last three years, upon which these estimates are based, including a 5% escalation factor.	\$34.4 million
Increased FERC relicensing cost projection for 2009 to 2011.	2.6 million
O&M costs were reduced by 5% in response to contractor requests.	(7.8 million)
Decrease in the Department's allocation of State Government pro-rata costs.	(2.9 million)
Salary costs for 2009 and half of 2010 were reduced by 3.31% due to State-mandated furloughs of Department employees.	(3.8 million)

Update of estimated San Luis Reservoir storage changes

0.1 million

Changes in assumptions of reservoir levels at San Luis resulted in an increase in costs of \$3.7 million. The Department assumed an 819,719 acre-feet reservoir fill for 2010 compared to a 228,070 acre-foot reservoir fill in the 2009 estimate and a reservoir drawdown for 2009 of 459,924 acre-feet compared to a reservoir fill of 228,070 acre-feet in last year's estimate of 2009.

Change in operations control system cost estimates for 2009 to 2011

0.3 million

Operations control systems estimates increased by \$8 million in 2009 to 2011 due to the following:

Remote terminal unit replacement cost estimate increases.	\$3.7 million
CAISO electricity market initiatives and transmission redesign cost increases.	4.5 million
Costs for the Project Operations Center and plant SCADA systems not included in prior year estimates.	2.6 million
Increased cost estimates for the Cyber-Security Infrastructure Protection compliance.	1.6 million
Reduction in cost estimates for control system migration.	(4.0 million)

Increase in estimated 2009 through 2011 costs for major O&M activities

0.4 million

The net increase in major O&M project costs for 2009 through 2011 allocated to conservation facilities total \$14.9 million for the entire project as a result of the following:

Thermalito Units 2 through 4 refurbishment, Hyatt turbine shutoff valve refurbishment and Thermalito wall panel repair	\$8.8 million
Estimated Delta mitigation land purchases of \$1.458 million a year for 2009 through 2011 have been added, where none were included in the 2009 Statement of Charges	4.2 million
Increases for Delta fish facility improvement projects and for fishery survival improvements under the 2004, 2009 National Oceanic and Atmospheric Administration Operation Criteria and Planning Biological Opinion and South Delta hydrodynamic study.	2.3 million

Refurbishment and remodeling of the 6 th floor of the Resources building	0.7 million
Division of Environmental Services increases to hire a consultant for salmon and smelt CESA and CEQA compliance for \$0.5 million and \$2.0 million for the replacement of the research vessel, San Carlos	0.7 million
Increases for aqueduct liner repair at mile posts 14.85 and 62 and at reach 2B, offset by decreases in liner repairs at reach 3	0.6 million
Addition of cost estimates for road and parking improvements at the Feather River fish hatchery and O&M center	0.6 million
Costs were added to the 2010 Statements of Charges for the Oroville Dam Spillway repair	0.4 million

These increases were partially offset by decreases as follows:

Decrease in the estimate for the repair analysis and coating of the Bidwell Bridge as no additional work is anticipated in 2010 as originally planned	(1.1 million)
Decrease in the estimate for the Montezuma Slough gate refurbishment	(0.8 million)
Reduction in cost estimates for the seismic retrofit of bridges in the San Luis Division	(0.8 million)
Correction of the estimates for future operations costs	(0.7 million)
Addition of \$2.6 million for Gianelli turbine, pump casing and draft tube refurbishment, offset by reduced costs for butterfly valve refurbishment as a result of the work being delayed	(0.7 million)
Total change in estimated costs	<u>19.8 million</u>

Changes in the operating credit for Hyatt-Thermalito: (6.1 million)

Oroville power revenues increased for year 2010 through 2035 by \$380 million as a result of the Department increasing its cost estimates for extraordinary O&M costs, which are recorded as a credit in the Delta Water Charge and a charge in the variable component.

TOTAL CHANGE IN DELTA WATER CHARGE MINIMUM COMPONENT **\$ 13.7 million**

EAST BRANCH ENLARGEMENT MINIMUM: The East Branch Enlargement minimum component decreased by \$1.8 million between 2009 and 2010 due to the following:

Changes in past cost adjustment: \$ (1.4 million)

The East Branch Enlargement minimum component decreased by \$1.4 million primarily due to an increase from estimated to actual costs of \$1.8 million for 2008, offset by a decrease in cost estimates of \$0.5 million for 2009, a decrease due to the overpayment of \$2.2 million included in the 2009 Statement of Charges and a decrease in 2006 costs of \$0.4 million.

Change in estimated costs: (0.4 million)

Estimated O&M costs decreased from 2009 to 2010 by \$0.5 million.

TOTAL CHANGE IN EAST BRANCH ENLARGEMENT MINIMUM COMPONENT **(\$ 1.8 million)**

WATER SYSTEM REVENUE BOND SURCHARGE: The Water System Revenue Bond Surcharge decreased by \$1.4 million as a result of the following:

Change in debt service costs:

\$ (1.4 million)

On March 19, 2009, the Department issued \$288 million of Series AF Central Valley Project Water System Revenue Bonds to refund \$267 million of Series Q, T and U and to refund \$33.4 million of commercial paper issued for the South Bay Aqueduct Enlargement and for Reid Gardner capital costs. Metropolitan's 2010 Surcharge decreased \$8.2 million as a result of the refunding of Series Q and U and decreased \$5.4 million due to a decrease in scheduled debt service for Series Z. These decreases were partially offset by an increase in scheduled debt service of \$2.8 million for Series AE and for scheduled debt service for Series AF beginning in 2010 of \$6.6 million.

TOTAL CHANGE IN WATER SYSTEM REVENUE BOND SURCHARGE

\$ (1.4 million)

Litigation Cost Doublebilling

The Department incorrectly allocated \$8,351,000 of costs for the Planning and Conservation League litigation to the contractors in the 2010 Statement of Charges, when the Department had already billed these costs to the water contractors as an addition to the transportation minimum component in the 2005 to 2010 Statements of Charges. By allocating these costs through the cost allocation process, the Department inadvertently double billed these costs. This error results in an overstatement of Metropolitan's transportation minimum component of \$3,589,000 and overstatement of the Delta Water Charge of \$97,000.

MWQI Program Posting Errors

In our audit of the 2009 Statement of Charges, we determined that the MWQI costs for 1999 through 2004 were posted twice in the billing system. This error has been corrected in the December 2008 revision of the 2009 Statement of Charges, resulting in a decrease to Metropolitan's transportation minimum component of \$5,853,000.

Correction of error in technology improvement costs

When compiling the 2008 and 2009 estimates for technology improvement projects, the Department included certain estimates in the 2009 Statement of Charges twice. This error was corrected in the rebill of the 2009 Statement of Charges, resulting in a decrease in Metropolitan's Delta Water Charge and transportation minimum component by \$123,000 and \$3,438,000, respectively.

MWQI Cost Allocation Revision

In last year's audit, we determined that a portion of the MWQI costs were billed by the Department and a portion are billed by the State Water Contractors Association (SWCA). A SWCA Consultant has determined that the Department incorrectly allocated these costs between the annual Statements of Charges and the SWCA in the 2009 Statement of Charges for calendar year 2008. The allocation between the Statements of Charges and SWCA was \$3.0 million and \$0.1 million, respectively, when the allocation should have been \$2.9 million and \$0.2 million, respectively. In addition, the allocation among contractors did not include maximum entitlement, which resulted in an error because not all contractors are receiving maximum entitlement. The Department has prepared a revised allocation and, as a result, Metropolitan's transportation minimum component increased by \$73,000 in the 2010 Statement of Charges.

Variable Cost Changes

The amount of Metropolitan's estimated future share of variable costs is affected by various factors including anticipated water deliveries, assumptions related to water and power operations and estimates of future power costs. The following sections highlight changes in the Department's assumptions and estimates. It is noteworthy that the following analysis is based on the assumptions and estimates available to the Department at the time the Statements of Charges were originally prepared. The actual results will vary from those described below.

- Water Deliveries: Last year's estimates of water deliveries for all contractors during 2009 compared to this year's estimates of deliveries during 2010 increased 14,701 acre-feet. Deliveries for 2009 and 2010 reflect the contractors' short-range, five-year projections submitted to the Department in September to October 2008.
- Water Supply: The water and power studies reflect compliance with the long-term National Marine and Fishery Service Winter Run Biological Opinion issued October 22, 2004; the long-term United States Fish and Wildlife Service Delta Smelt Biological Opinion issued December 15, 2008; the Amended 2084 Measures for the Emergency Regulation to Authorize take of Longfin Smelt issued November 14, 2008; and the March 15, 2000 revision of the December 1999 Water Right Decision 1641. The water supply assumption used for water and power operations studies assumed the delivery of 2.05 million acre-feet in 2009 and 3.35 million acre-feet in 2010. Water supply for 2009 and 2010 is assumed to be sufficient to meet the water contractors' requested deliveries while leaving 0.8 million acre-feet of stored water in Oroville Reservoir and 0.2 million acre-feet stored in San Luis Reservoir at the end of water year 2009 and

2.8 million and 0.5 million acre-feet, respectively, stored at the end of 2010. Lower quartile inflow was assumed for Pine Flat generating facilities in 2009 and 2010. These assumptions will result in higher transportation variable OMP&R unit rate projections than would be estimated for a median hydrologic year. If the variable unit rates are determined to be lower than this initial projection, adjustments will be made to the contractors' transportation variable charges during the appropriate billing year. The operations studies used to prepare the 2010 bills assumed the South Delta Improvement Program facilities permanent operable barriers will be operational by April 2012.

- Variable Billings: In order to reduce the overbillings and later adjustments, Metropolitan and the other contractors previously entered into a five-year variable component reduction agreement that expired in 1999 whereby the Department would recalculate its unit charges using the projected delivery of 75% of Table A water requests prior to January 1 and would revise the unit rates downward. This agreement was intended to ensure that the Department has sufficient revenue to effectively operate the Project without unduly burdening the contractors with unrealistic billings. Although a new agreement has not been negotiated, the contractors continue to work with the Department to ensure the rates billed for 2010 are realistic.

We prepared a detailed analysis of the change in the net pumping costs included in the variable component between Bulletins 132-08 and 132-09 for 2009 compared to 2010. The Bulletin 132-08 numbers were used in the 2009 Statement of Charges and the Bulletin 132-09 numbers were used in the 2010 Statement of Charges. Our analysis is summarized on the following page.

COMPARISON OF PUMPING COSTS BETWEEN BULLETIN

132-08 AND 132-09 FOR 2009 AND 2010

	2009 132-08	2010 132-09
Sources:		
Recovery generation*	\$ 119,634	\$ 131,765
Pine Flat	11,805	12,250
MWD Hydro	9,894	9,492
Non-Firm purchases	227,974	158,094
Duke energy purchases	91,445	59,402
Grid management charge	30,000	30,000
Ancillary services purchased	16,000	16,000
PG&E rate submittal	9,200	8,933
AG Gas settlements		3,467
Contingency: Energy market redesign		10,325
Contingency: Cash flow timing		10,000
	<u>515,952</u>	<u>449,728</u>
Sales (at 117 mills and 52 mills per KWh)	(69,833)	(55,917)
Firm sales (at 71 mills per KWh)	(1,071)	
Ancillary services revenue	<u>(24,000)</u>	<u>(24,000)</u>
Net pumping cost	<u>421,048</u>	<u>369,811</u>
Variable Transmission Cost	<u>24,734</u>	<u>31,728</u>
Net pumping cost allocated to plants	<u>\$ 445,782</u>	<u>\$ 401,539</u>

	2009 132-08	2010 132-09
*Recovery generation:		
Hyatt-Thermalito	\$ 30,891	\$ 37,844
Thermalito Diversion	766	766
San Luis	2,860	4,190
Alamo	5,621	6,436
W.E. Warne	9,310	12,337
Devil Canyon (including 2 nd Afterbay)	36,730	31,011
Castaic (including LADWP credit)	17,056	23,730
Mojave Siphon	8,264	8,665
Coastal Branch Power Cost	2,935	1,781
Tehachapi Afterbay	<u>5,201</u>	<u>5,005</u>
Total	<u>\$ 119,634</u>	<u>\$ 131,765</u>

Future Potential Refunds and Adjustments

Metropolitan's estimated 2010 charges of \$650.7 million do not include certain credits, refunds and adjustments that are expected in 2010 as part of the Department's normal accounting and billing process. The refunds below are expected to reduce Metropolitan's 2010 billings by approximately \$47.6 million for the following items:

	Estimated Refund Date		
<u>Cover – Off-Aqueduct</u>			
July – December 2008	April 2010	\$ 4,515,000	
January – June 2009	October 2010	<u>4,345,000</u>	\$ 8,860,000
<u>Cover – Water System Revenue Bond (WSRB)</u>			
January 2009	October 2010	<u>7,653,000</u>	7,653,000
<u>Cover – East Branch Enlargement (EBE)</u>			
March 2009	April 2010	3,101,000	
September 2009	October 2010	<u>3,095,000</u>	6,196,000
<u>Cover – Tehachapi Second Afterbay</u>			
March 2009	April 2010	415,000	
September 2009	October 2010	<u>493,000</u>	908,000
<u>Federal Securities Earnings</u>			
July – December 2008	March 2010	516,000	
January – June 2009	March 2010	516,000	
July – December 2009	March 2010	516,000	
January – June 2010	October 2010	<u>516,000</u>	2,064,000
<u>SMIF Interest – Off-Aqueduct</u>			
July – December 2008	March 2010	685,000	
January – June 2009	March 2010	685,000	
July – December 2009	March 2010	685,000	
January – June 2010	October 2010	<u>685,000</u>	2,740,000
<u>SMIF Interest – WSRB</u>			
July – December 2008	March 2010	634,000	
January – June 2009	March 2010	634,000	
July – December 2009	March 2010	634,000	
January – June 2010	October 2010	<u>634,000</u>	2,536,000
<u>SMIF Interest – EBE</u>			
July-December 2008	March 2010	313,000	
January-June 2009	March 2010	313,000	
July – December 2009	March 2010	313,000	
January – June 2010	October 2010	<u>313,000</u>	1,252,000
<u>SMIF Interest – Reserve Account</u>			
July – December 2008	March 2010	1,961,000	
January-June 2009	March 2010	1,961,000	
July – December 2009	March 2010	1,961,000	
January – June 2010	October 2010	<u>1,961,000</u>	7,844,000
<u>Devil Canyon and Tehachapi Second Afterbay</u>			
2009 Devil Canyon debt service	May 2010	4,254,000	
2009 Tehachapi debt service	May 2010	<u>3,328,000</u>	7,582,000
TOTAL ESTIMATED REFUNDS			<u>\$ 47,635,000</u>

In addition, the 2010 variable and off-aqueduct charges may be reduced further if 2010 costs are determined to be overstated during the year. Also, amounts described in this section are in addition to the other credits, refunds and adjustments related to audit findings that are summarized on page 134.

Federal securities earnings and SMIF interest for July 2008 through June 2009 should have been refunded during 2009. However, the Division of Fiscal Services has indicated that SMIF interest refunds will not be calculated until SWPAO completes the analysis of the reallocation of the bond debt service reserves.

MONTEREY AMENDMENT IMPLEMENTATION

In 1995, the agricultural contractors, urban contractors and the Department signed the “Monterey Agreement – Statement of Principles”. This contract was the foundation for an agreement among the contractors and the Department that was intended to settle disputes over water allocations and certain operational aspects of the State Water Project. The principles of the Monterey Agreement were then incorporated into an amendment to the Water Supply Contracts, which is known as the Monterey Amendment. Full implementation of the Monterey Amendment occurred in the 1998 Statement of Charges. The following is a summary of the impacts of the implementation of the Monterey Amendment on the 2010 Statement of Charges, as well as any findings we had as a result of verifying that the provisions of the Amendment continue to be properly implemented:

- The Monterey Amendment required the Department to establish a General Operating Account by transferring \$22 million of revenue bond debt service reserves on retired bonds into the account. The Department does not separately track the amount associated with the Monterey Amendment but instead includes these monies within the Deposits in SMIF Account in the Bond Fund. The Department has determined that there would be no rate reduction credits in the 2010 Statement of Charges. The Department is still in the process of analyzing its cash flow situation, which will likely not be completed prior to the issuance of the December 2009 rebill of the 2010 Statement of Charges, so rate reduction credits will likely not be included. These credits may be included in future revisions to the 2010 Statement of Charges as a result of the Springing Amendment. The 2009 Statement of Charges, initially issued without rate management credits, was revised in August 2009 and included \$15 million in rate management credits. These amounts are less than the annual requirement of \$40.5 million due to a shortfall in the Department’s cash flow. We will continue to work with Metropolitan and the other contractors to monitor the Department’s cash flow to determine that funds are available to issue the full rate reduction credits required by the Monterey Agreement.
- In previous audits, we reported that the Department had recalculated the credits for 1997 through 2004 because they had incorrectly used a Table B-15 that had been adjusted for the changes related to the permanent transfer of entitlement water. This recalculation resulted in an additional credit of \$803,000 for Metropolitan, of which \$606,000 was included in the 2005 rate reduction credit and \$119,000 plus interest was included in the 2007 rate reduction credit. The remaining \$79,000 was improperly excluded from the 2005 rate reduction credit due to an error in the Department’s reallocation computation. We will continue to monitor the return of this additional credit.
- The Monterey Amendment also states that the allocation of the rate management credits, which utilizes the transportation capital component repayment obligation amounts from Table B-15, be

recalculated once every five years, unless requested by a contractor to be recalculated more frequently. Bulletin 132-99 had been used to allocate rate management credits since 2000, although the Bulletin 132-04 Table B-15 amounts should have been used to calculate the rate management credits beginning with the 2005 Statement of Charges. In the August 2009 revision of the 2009 Statement of Charges, the 2005 and 2006 credits were calculated using the Table B-15 from Bulletin 132-04, reducing Metropolitan's 2005 and 2006 credits by \$159,000 and \$121,000, respectively, including interest.

- Under Principle Number Four, the Agricultural Contractors will make available up to 130,000 acre-feet of annual Table A entitlement for permanent transfer to urban contractors on a willing buyer-willing seller basis. In aqueduct reaches where the seller did not participate in repayment and where the buyer wants additional capacity to transport the increased Table A entitlement, the Proportionate Use of Facilities Factors (PUFF) are revised prospectively. We noted 24,700 acre-feet in new transfers that affected the PUFF used in the 2010 Statement of Charges as a result of Desert and Coachella purchasing capacity from Tulare and Kern.
- We noted that the Department has not returned almost \$20.5 million in credits for using capacity in the aqueduct, due to water transfers, to the downstream contractors. We will continue to monitor the status of these credits in our future year reports.

COST ALLOCATION AND DISTRIBUTION

Payments and Credits

In prior audits of the attachments to the 2008 Statement of Charges, we noted that Metropolitan's 2006 variable payment did not include payments made for the November and December variable invoices totaling \$940,000. During our audit of the 2009 Statement of Charges, we noted that Metropolitan's 2007 variable payment was \$5,000 lower than the variable payments included in SAP. Our audit of the 2010 Statement of Charges disclosed that the 2008 variable payment is understated by \$59,000 compared to SAP. As a result of these items, Metropolitan's variable component is overstated by \$1,195,000 in the 2010 Statement of Charges. We have notified the Department of these errors and we anticipate that the payment amounts will be corrected for the 2011 Statement of Charges.

The Federal government previously paid for flood control costs at Oroville, but no longer did so beginning in 1986. To include these costs in the contractor billings, the Department must prepare entries to allocate Oroville flood control costs to the contractors each year. Our audit of the 2010 Statement of Charges disclosed that the Department did not make this entry before the 2010 Statement of Charges was issued. As a result, Oroville flood control costs totaling \$201,000 were excluded from the 2010 Statement of Charges, understating Metropolitan's Delta Water Charge by \$7,000. We have notified the Department of this error and anticipate that the payment amount will be corrected in the 2011 Statement of Charges.

Retroactive Adjustments and Changes

The Department has the ability to retroactively adjust accounting entries and cost allocations as if they had transpired in a previous year. Our objective is to determine that these changes to the accounting system are properly processed through the allocation and distribution procedures without material error and are consistent with the Department's accounting policies. These entries could have a significant effect on Metropolitan's Statement of Charges as costs are shifted among contractors or to prior years where they are compounded to the present at the Project Interest Rate.

Under the previous system (UCA) we were able to extract a list of retroactive adjustments and changes; however, we have been unable to produce a similar list in the SAP system. While the Department has indicated that minimal retroactive adjustments and changes have been made in SAP since the system went on-line on July 1, 1999, we have requested that the Department develop a report that will display all retroactive adjustments and changes that have been made in SAP to enable us to verify adjustments and changes that are made in following years.

Our audit of the Department's update of the 2008 O&M tables disclosed the following items:

- We noted two instances in the Department's preparation of the O&M Table updates whereby alphanumeric cost centers incorrectly excluded certain numeric reaches. Although these errors have not had a material effect on the contractor billings due to the immaterial cost center amounts, we have brought these errors to the attention of the Department for correction.
- Prior to the implementation of SAP, salary and wage tables were updated similarly to O&M tables. However, because SAP does not provide salary and wage information separately, these tables can no longer be prepared. As a result, all O&M costs are now being allocated using tables based on plant maintenance orders. However, we noted that the Department continues to use these outdated salary and wage tables for the allocation of SWPAO costs. We informed SWPAO to use O&M tables in place of salary and wage tables to ensure the allocations are based on the most current information, and they indicated that they would work with the Fiscal Division to resolve this issue.
- The Department is in the process of reviewing and documenting the allocation process, in preparation for creating a new distribution process using the new SAP system. The Department will then rerun the assessment cycles, which could result in changes in the allocations of costs back to 1999. We will continue to monitor these revisions and evaluate their propriety when they occur. Responsibility for this assessment process is also being reassigned to SWPAO instead of a section within the Fiscal Services Office.

Debt Service Reserve

The Department is required by bond covenants to maintain bond debt service reserves. The reserve amount is recomputed with each new series issued. Until 1995, the Department maintained separate accounts for each bond series, which included the reserve, as well as receipts from contractors, SMIF interest and payments of debt service. In 1995, the Department consolidated the accounting for the bonds, combining the reserves into one account. Off-aqueduct reserves were consolidated with other reserves, even though the off-aqueduct reserves were collected from the contractors directly based on water deliveries, while other reserves were funded by bond proceeds. Since 1995, the SMIF interest earned on the debt service reserve balance has been returned to the contractors semi-annually in proportion to the contractors' payments of the off-aqueduct, East Branch Enlargement and WSRB charges.

In 2001, the Department analyzed the debt service reserve balance of \$180,954,755 (through Series AA) and determined that \$56,595,746 of this balance was collected from the contractors in 1983, 1984 and 1985 based on water deliveries in those years to fund reserves required for off-aqueduct bonds. The remaining balance of \$124,359,009 was provided through bond proceeds to fund the reserves required by subsequent bond issues. Recently, the Department has determined that due to the repayment of a portion

of the off-aqueduct bonds, the current outstanding off-aqueduct bonds require a reserve of only \$29,774,507. The remaining amount collected from the contractors of \$26,821,239 is being maintained in the reserve account to meet the reserve requirements for various Water System Revenue Bonds. To date, the Department has not addressed the issue of the off-aqueduct reserves funding the debt service reserves for these other bond issues. The \$26,821,239 of reserves would need to be funded from some other source should it be determined that this amount should be returned to the contractors. We have provided documents to the Department personnel that will be responsible for evaluating this issue.

In April 2007, the Department returned \$18,192,000 of excess debt service reserves attributable to Series A, B, D, K, L and P and \$28,821,000 of accumulated interest earnings related to a U.S. Treasury strip investment. We were unable to obtain a response from the Department about whether this refund relates to the \$26,821,239 excess debt service reserve calculated by the Department in their 2001 study, as described above. It appears that in determining the excess debt service reserve to be returned, the Department did not consider separately the portion of the reserve collected through the off-aqueduct component in 1983, 1984 and 1985. Although we noted that \$308,000 of the excess reserve returned related to the Bottlerock and South Geysers off-aqueduct facilities, we were unable to determine whether any other portion of this excess had originated from off-aqueduct bonds that were subsequently refunded by Water System Revenue Bonds. Recent information received from the Department indicates that the portion of the reserve collected through the off-aqueduct component will be considered in the final refund of the excess debt service reserves done as part of the Springing Amendment, as discussed below.

In documents prepared as part of the debt service reserve study in 2001, we noted that Metropolitan paid approximately 66.3% of the off-aqueduct reserve collected in 1983, 1984 and 1985. We noted that Metropolitan's portion of the excess debt service reserve refund discussed in the previous paragraph was 66.6%, so even if most of the \$18,192,000 of the excess debt service reserves that were returned originated from off-aqueduct debt service reserves, then Metropolitan's share of the refund appears reasonable. We will continue to follow up on this issue to ensure that Metropolitan was properly refunded the appropriate share of any excess debt service reserve amounts.

Springing Amendment

On April 1, 2002, the Department adopted Resolution No. DWR-WS-48 and Resolution No. DWR-WS-49 (Supplemental Resolutions), which amend provisions of the General Bond Resolution relating to the Debt Service Reserve Account. The Supplemental Resolutions change the Reserve Account Requirement and provide that if the balance in the Debt Service Reserve Account exceeds the Reserve Account Requirement, any excess funds may be transferred to any legally permissible fund or account designated by the Department, and permit the substitution of a Reserve Fund Instrument for cash in the Debt Service Reserve Account.

As a result of the adoption of the Supplemental Resolutions, the Department is in the process of determining the amount of the debt service reserve available for refunding, the allocation of the excess to projects and the allocation from projects to contractor. Initial analysis by the Department's Fiscal Services Office indicated that the total amount to be refunded to contractors was \$72.1 million. A second revision was made to the 2008 Statement of Charges in July 2009 to include credits of \$3.4 million for excess debt service reserves and \$2.4 million for WSRB Series AE capitalized interest. The \$3.4 million debt service reserve credit was intended to offset the \$3.4 million of Delta Habitat Conservation and Conveyance Program (DHCCP) that were also included in the revised 2008 Statement of Charges. Metropolitan's share of this debt service reserve credit was \$2.7 million. Likewise, in the December 2008 revision to the 2009 Statement of Charges, the Department included credits of \$30 million for excess debt service reserves, of which Metropolitan's share was \$18.7 million. In an analysis prepared by SWAPO in June 2009, the Department has indicated that after the credits discussed above and the addition of \$28.3 million of excess off-aqueduct debt service reserves collected from contractors in 1983 to 1985, \$64.6 million remains to be distributed. However, the contractors believe that the credits given thus far have not been allocated equitably among contractors. Currently, SWAPO is preparing a revised allocation methodology for the return of the remaining \$64.6 million, which was not available as of the date of our report. We will follow up on the status of the return of the remaining debt service reserves in our audit of the 2011 Statement of Charges.

SMIF Interest

We reviewed the supporting documentation for the various refunds related to the SMIF Interest Allocation for Off-Aqueduct, WSRB, East Branch Enlargement, and the Debt Service Reserve Account. We noted errors in the calculation of the SMIF interest refund, causing Metropolitan's portion of the refund to be overstated by \$6,000. We have informed the Department of this issue so that future refunds can be adjusted.

Suisun Marsh Cost Reimbursement

The construction and O&M costs associated with the Suisun Marsh are to be paid 40% by the Department (to be reimbursed by the SWC), 40% by the United States Bureau of Reclamation (USBR) and 20% by the State General Fund according to the Suisun Marsh Preservation Agreement. However, we noted that 100% of the historical costs are being included in the cost accounting system, of which the contractors were allocated 86% in the 2007 and prior Statements of Charges. Beginning with the 2008 Statement of Charges, the contractors are now allocated 97.7% of Suisun Marsh O&M costs and 97.6% of the Suisun Marsh capital costs due to the Department changing the recreation allocation percentage from 14% to 3.3% for minimum costs and 3.4% for capital costs, which is discussed further in the DELTA WATER CHARGE section of this report. Upon the receipt of payments from the USBR for their 40% share, the Department makes the appropriate credits in the cost accounting system. As a result, the contractors are

subsidizing the USBR's reimbursable costs for an interim period. O&M costs totaling \$1,835,000 are included in the 2010 Statement of Charges because they have not yet been reimbursed by the USBR. These invoices date back to September 2007 for costs incurred from September 2007 through December 2008.

After receiving the credit for the USBR's 40% share, the contractors are now being charged 56.7% of O&M costs and 56.6% of capital costs for Suisun Marsh, compared to the 40% that was agreed upon in the Agreement. This additional 16.7% of minimum and 16.6% of capital costs represents the amounts that were to be reimbursed by the State General Fund depending upon the availability of Tideland Oil and Gas Revenue. The State's share of the Suisun Marsh costs through June 1988 were offset against the Department's liability to the California Water Fund through the offset legislation. However, the contractors are being charged for the additional 16.7% of minimum and 16.6% of capital costs incurred since June 1988, which total \$23,657,000, as well as future costs from 2009 to 2035, which total \$6,762,000. As a result, the Delta Water Charge of Metropolitan's 2010 and future Statements of Charges are higher by \$913,000 a year through 2035. The Department does not anticipate that Tideland Oil and Gas Revenue will be available to cover the State's share of expenditures incurred since June 1988 and the Department was not allowed to offset these expenditures against the California Water Fund liability. Thus, the contractors will continue to be charged for the additional 16.7% of minimum and 16.6% of capital Suisun Marsh costs under the Water Supply Contracts. As a result of changing the recreation allocation, the Suisun Marsh costs allocated to the contractors have increased significantly. This change resulted in costs incurred since June of 1988 to change from \$8,564,000 to \$23,657,000, an increase of \$15,093,000. Future costs from 2009 to 2035 changed from \$2,732,000 to \$6,762,000, an increase of \$4,030,000. The annual impact of allocating additional Suisun Marsh costs as a result of the change in the recreation allocation percentage is a \$574,000 increase in Metropolitan's Delta Water Charge each year. A workgroup of water contractors and auditors have met to study this situation. The group determined that the issue would be put on hold until more favorable economic conditions prevailed in the State which might allow for collection of these amounts. We will continue to include this information in this report and will work with Metropolitan to determine a time frame for pursuing this item.

San Luis Reservoir Cost Reimbursement

The O&M and capital costs associated with the San Luis Reservoir, which is jointly owned by the Department and the USBR, are to be paid 55% by the Department (to be reimbursed by the SWP contractors) and 45% by the USBR. However, we noted that for capital expenditures incurred at San Luis, 100% of these costs are being included in the cost accounting system, of which the contractors are allocated 97%. Upon the receipt of payments from the USBR for their 45% share, the Department makes the appropriate credits in the cost accounting system. As a result, the contractors are subsidizing the USBR's reimbursable costs for an interim period. Capital costs totaling \$1,427,000 for costs incurred

from January 2006 through December 2008 are included in the 2010 Statement of Charges because they have not yet been billed to or reimbursed by the USBR. We will continue to monitor these reimbursements to ensure that they are billed and eventually credited in the cost accounting system.

In our prior year audit, we determined that the Department did not record the credits in the cost accounting system for payments received from the USBR in 2006 totaling \$166,000 for San Luis capital costs. Because the contractors are charged initially for 100% of the costs until reimbursement is received from the USBR, Metropolitan's transportation capital and Delta Water Charge capital components were overstated. We verified that the Department recorded the credits for the payments received from the USBR during 2008, resulting in a reduction of Metropolitan's transportation capital and Delta Water Charge capital components by \$5,000 and \$2,000, respectively, in the 2010 Statement of Charges.

Seismic Retrofit of Bridges

The Department has incurred costs to perform the seismic retrofit of bridges crossing the aqueduct totaling \$2,645,000 through December 2008. The bridges in the San Luis Division are considered joint use facilities, for which the USBR is responsible for reimbursing 44%, or \$854,000 of these costs. The USBR has been billed for costs through March 2008, for which the Department has received reimbursement of \$643,000. A federal grant has also been obtained through the California Department of Transportation that covers 80% of these costs. We determined that the Department has billed and received reimbursement from CalTrans for \$781,000, representing costs incurred through March 2008. These amounts have been properly credited to the contractors. However, as a result of contracting issues with Caltrans, grant reimbursement has only been received up through March 2008; thus \$354,000 remains to be reimbursed from this grant when these issues are eventually resolved. We will continue to monitor these billings to ensure that these amounts are properly billed and credited in the cost accounting system.

Distribution of Costs to Project Purpose, Reaches and Features

The Department's accounting system enables costs incurred by the Department to be distributed to one or more numeric cost center through the use of program cost centers and cost elements and provides for the identification and distribution of costs, based upon the benefits received, to the various Project purposes such as recreation, Joint State/Federal facilities and flood control operations. We tested a sample of new cost centers established in 2008, including reach cost centers and Project purpose cost centers, for propriety, consistency and clerical accuracy of the distribution basis. Except for the continued absence of a cost allocation to recreation purposes for off-aqueduct power facilities, all reach and Project purpose allocations appeared reasonable and consistent with prior years.

We found no instances in our current year audit of incorrectly assigned cost centers, except as indicated in the next paragraph. This is a result of recent procedural changes in the Department's process for creating

program cost centers. However, as a result of our testing, we continued to note a procedural weakness in the Department's internal controls regarding the documentation of the 1121a's, which are the basis for authorizing new cost centers. We still noted that the 1121a's were not consistently signed by the Funds Oversight Analyst in the Section IV "approved by" block, as required by the Department's procedures. We have brought this issue to the Department's attention.

We noted a cost center containing costs for relocating the Division of Environmental Services for 2006 to 2008 totaling \$1,406,000 that were not properly assessed in the cost accounting system, resulting in these costs not being included in the 2010 Statement of Charges. As a result, Metropolitan's transportation minimum component is understated by \$914,000.

During our 2002 audit, we noted that upon the conversion from the UCA system to SAP that certain conservation costs from 1999 to 2002, including Bay-Delta environmental protection studies, compliance monitoring, environmental protection support, planning model development, Delta facilities planning and Bay-Delta proceedings, were being allocated on a statewide basis and billed to the contractors mostly through the transportation minimum component; whereas in the UCA system, these costs were being allocated to a Delta facilities reach and were being billed to the contractors through the Delta Water Charge, after the allocation to the recreation Project purpose. However, when the Department made the correction in the rebilling of the 2003 Statement of Charges, they changed the allocation of the 1999 and future costs to a Delta facilities reach that did not contain an allocation to the recreation Project purpose, resulting in a change in the way the 1999 and future costs were being allocated compared to the 1999 and prior costs that were allocated in the UCA system. We examined the documentation that established the coding of these cost centers and that documentation supports the allocation methodology that was utilized in the UCA system, where a portion of these costs are allocated to the recreation Project purpose.

We noted that this revised allocation methodology has carried forward from the SAP Legacy system to SAP Next Wave, resulting in \$89,531,000 of minimum costs and \$3,368,000 of capital costs from 1999 through 2008 being allocated entirely to the contractors, instead of 3.3% for minimum and 3.4% for capital costs being allocated to the recreation Project purpose. The impact of the Department allocating the various conservation costs described above entirely to the contractors, instead of a portion being allocated to recreation, results in the overstatement of Metropolitan's 2010 and future Delta Water Charge by \$115,000 each year. In addition, Metropolitan's 2001 through 2009 Statements of Charges have been overstated by \$368,000 as a result of the allocation change. The Department has taken the position that the allocation of the costs entirely to the contractors is correct, but has not provided documentation to support this position. We recommend that this change in allocation methodology be addressed by Metropolitan and the other contractors in conjunction with the Department's change in the recreation allocation percentage from 14% to 3.3% and 3.4%.

Reconciliation of the Cost Accounting System

We performed a reconciliation of the capital and minimum costs included in the SAP system to the Bulletin 132 B-Tables on a test basis to identify any improper additions or omissions of costs which would ultimately affect contractor billings. In addition, we verified that all costs in SAP were included in the preparation of the bills and were properly redistributed within the SAP system.

In the SAP Legacy system, the Department was able to run a report that would reconcile the controlling module, which was used to prepare the Statement of Charges, to the financial module. Upon conversion to the latest version of SAP, the Department had not created a functioning report to reconcile the UCAB's module used for billing purposes to the financial module. We discussed this issue with the Department during our current year audit and they indicated that due to incompatible functions between the financial and UCAB modules, a functioning report that provides a reliable reconciliation cannot be generated. The Department has developed a manual process to reconcile the two systems, however this process has not been formally adopted by the Department. We will follow up on this matter during next year's audit to determine the propriety of the reconciliation process.

It appears the Department does not have the review procedures in place for ensuring that all costs are properly allocated to a final billable cost center. We noted several suspense cost centers that appear to contain billable costs totaling \$638,000. We will follow up with the Department on reconciliation procedures used to determine the propriety of costs allocated to a suspense cost center.

Controlling Module Adjustments

Our audit procedures included a review of entries made to the Controlling Module in SAP affecting the 2010 Statement of Charges. All entries within our audit scope appeared proper.

As a result of problems with the conversion to the new SAP system, assets recorded in the Department's general ledger and asset accounting systems from July 1, 2006 to June 30, 2008 were not being transferred to the UCABS module of the SAP system where the costs are charged to the contractors. This malfunction resulted in the improper exclusion of these asset purchases from the 2007 through 2010 Statements of Charges. As a result, manual entries were required to include these costs in contractor billings. In July 2007, the Department recorded an adjustment for \$3,384,000 to record the fiscal year 2007 assets, which was reflected in the 2009 Statement of Charges. In June 2009, an adjustment of \$4,086,000 was processed to record the 2008 fiscal year purchases, was reflected in the 2010 Statement of Charges. We examined the entries and they appear proper. As of July 1, 2008, the system has been functioning properly and no further entries will be required.

DELTA WATER CHARGE

Project conservation costs are reimbursed through the Delta Water Charge. This charge is based upon each contractor's Table A and the Delta Water Rate, which is designed to recover all conservation costs, with interest, over the life of the Project. The rate changes annually as various cost projections are refined and historical costs are entered.

The objective of our examination of the Delta Water Charge was to determine the contractual propriety, consistency and clerical accuracy of the Delta Water Rate and other components that enter into the computations of the rate. In order to achieve this objective, we recomputed the Delta Water Rate and identified factors which caused it to fluctuate. We also compared costs used in Bulletin 132-09 to those in Bulletin 132-08 and obtained explanations of the fluctuations. The Delta Water Rate was \$37.66 per acre-foot in the 2010 Statement of Charges. Our procedures revealed the following changes:

	Cost Component (\$/AF)		
	Capital	Minimum	Total
Original 2009 Delta Water Rate	\$ 15.51	\$ 19.46	\$ 34.97
December 2008 Rebill Adjustment	(2.46)	(2.03)	(4.49)
Revised 2009 Delta Water Rate	13.05	17.43	30.48
Power revenues	0.02	(3.37)	(3.35)
Delta facilities recreation reallocation	(0.02)	-	(0.02)
Additional Conservation		0.01	0.01
Changes in historical and future costs:			
Oroville	0.18	4.29	4.47
Delta facilities	(0.15)	5.08	4.93
North San Joaquin and San Luis	(0.01)	1.15	1.14
NET CHANGE	0.02	7.16	7.18
2010 Delta Water Rate	\$ 13.07	\$ 24.59	\$ 37.66

2009 Rebill Adjustments

The Department issued a rebill of the 2009 Statement of Charges in December of 2008, in which the capital component of the Delta Water Charge decreased by \$2.46 per acre-foot and the minimum component decreased by \$2.03 per acre-foot from the original Statement of Charges issued in July, 2008. These revisions reduced Metropolitan's Delta Water Charge by \$8,585,000.

Capital Component

The decrease in the capital component of the Delta Water Charge is primarily due to the Department removing estimates totaling \$200,000,000 related to the 4th Amendment to the Four Pumps Agreement, which the contractors had not agreed to. This change resulted in a \$2.47 per acre-foot decrease in the Delta Water Rate and a \$4,727,000 decrease in Metropolitan's Delta Water Charge.

Minimum Component

The decrease in the minimum component in the December 2008 revision to the 2009 charges is primarily the result of the following:

Planning and Pre-operating: Planning and pre-operating costs decreased primarily due to the removal of Delta Habitat Conservation and Conveyance Program estimates for 2008 through 2010 totaling \$128,000,000. This change resulted in a \$1.90 per acre-foot decrease in the Delta Water Rate and a \$3,635,000 decrease in Metropolitan's Delta Water Charge.

Valuation of Recovery Generation: The Delta Water Charge included in the rebill of the 2009 Statement of Charges decreased \$0.05 due to the following:

- Oroville power revenues for 2000 through 2007 increased by \$5,155,000 resulting from changes made to update Oroville operating and FERC credits to reflect actual costs. The updating of these amounts resulted in a \$0.10 per acre-foot decrease in the Delta Water Rate and a \$191,000 decrease in Metropolitan's Delta Water Charge.
- In the prior year, the Department erroneously reflected technology improvement costs twice for 2008 through 2010. The Department corrected this error, which overstated Oroville power costs and Oroville power revenues, in the rebill of the 2009 Statement of Charge. The correction of this error affects reaches statewide and is quantified in total in the FUTURE COSTS section of this report. The correction resulted in a decrease of \$2,168,000 in the Oroville power credit, which resulted in a \$0.03 per acre-foot increase in the Delta Water Rate and a \$61,000 increase in Metropolitan's Delta Water Charge.
- Power revenues decreased for 2035 by \$4,960,000 due to the correction of an input error. This correction resulted in an increase of \$0.02 per acre-foot in the Delta Water Rate and \$44,000 increase in Metropolitan's Delta Water Charge.

Oroville Division: The \$0.01 per acre-foot decrease in the Delta Water Charge included in the rebill of the 2009 Statement of Charges is due to the following:

- Oroville division costs for 2003 through 2007 were increased by \$1,291,000 when Planning and Conservation League (PCL) litigation costs were erroneously assessed statewide in the SAP accounting system. These costs should not be included in the Delta Water Charge because they are charged to contractors separately on Attachment 4C of the Statement of Charges. See the FUTURE COSTS section of this report where we discuss the full affect of this error on Metropolitan's 2010 Statement of Charges. The inclusion of these costs resulted in a \$0.02 per acre-foot increase in the 2009 Delta Water Rate and a \$46,000 increase in Metropolitan's Delta Water Charge.

- As discussed in the Oroville power revenue changes above, the 2008 to 2010 costs decreased by \$2,168,000 due to the correction of an error included in the 2009 Statement of Charges where the Department erroneously reflected technology improvement costs twice. This correction resulted in a \$0.03 per acre-foot decrease in the Delta Water Rate and a \$61,000 decrease in Metropolitan's Delta Water Charge.

North San Joaquin and San Luis: The \$0.04 per acre-foot decrease in the Delta Water Charge included in the rebill of the 2009 Statement of Charges is primarily due to the following:

- Costs for 2004 decreased due to the Department recording credits for special water wheeling transactions totaling \$483,000 and adjusting the San Luis value of recovery generation credit by \$476,000. These reductions were offset by an increase of \$314,000 from the Planning and Conservation League litigation costs charged in error as discussed above. These and other insignificant changes resulted in a \$0.01 per acre-foot decrease in the Delta Water Rate and a \$22,000 decrease in Metropolitan's Delta Water Charge.
- Special water wheeling credits for 2007 totaling \$842,000 were properly recorded in the SAP accounting system, resulting in a \$0.01 per acre-foot decrease in the Delta Water Rate and a \$25,000 decrease Metropolitan's Delta Water Charge.
- For 2008 through 2010, costs decreased by a total of \$1,377,000 due to the correction of an error we noted in the 2009 Statement of Charges, where the Department erroneously included technology improvement costs twice. This correction resulted in a \$0.02 per acre-foot decrease in the Delta Water Rate and a \$39,000 decrease in Metropolitan's Delta Water Charge.

Capital Component Fluctuations

The capital component of the Delta Water Rate included in the 2010 Statement of Charges increased by \$0.02 per acre-foot from the December 2008 rebill of the 2009 Statement of Charges, which resulted in a \$38,000 increase in Metropolitan's Delta Water Charge. The increase is primarily the result of the following:

Valuation of Recovery Generation: A decrease in the capital portion of the recovery generation credit for Hyatt-Thermalito increased the Delta Water Rate by \$0.02 per acre-foot and increased Metropolitan's Delta Water Charge by \$43,000. The credit decreased by \$2,125,000 for 2009 to 2029, or approximately \$144,000 in 2009 and \$99,000 per year from 2010 to 2029, due to an update in the allocation of debt service costs related to the issuance of bonds to fund the cost of refurbishment of Units 2, 4, and 6 at the Hyatt-Thermalito Powerplant. The Department indicated that the updated allocation is due to the finalization of the debt service schedule that includes Series AE, which was based on preliminary amounts in the 2009 Statement of Charges. The annual debt service amounts are included as a credit in the Delta Water Charge, since these debt service costs are billed through the variable component. See the

REPLACEMENT section of this report for discussion of an error related to this revised debt service schedule.

Delta Facilities Recreation Reallocation: Beginning in the 2008 Statement of Charges, the Department reallocated 10.6% of Delta facilities recreation costs to the contractors by calculating an incremental Delta Water Rate to capture these additional costs. In the 2010 Statement of Charges, this incremental rate decreased by \$0.02 per acre-foot as a result of reduced costs from the prior year to the current year Delta Water Rate calculations because changes in the incremental costs were not reflected in the rebill of the 2009 Statement of Charges. This decrease was offset by an increase resulting from a new base year for calculating the present value of these costs. These changes result in a \$27,000 decrease in Metropolitan's Delta Water Charge. See the UNRESOLVED ISSUES section of this report for a further discussion of this allocation.

Oroville Division: The \$0.18 per acre-foot increase in Oroville Division costs is primarily due to the following:

- Costs for 1999 through 2007 increased by \$2,421,000 due to Hyatt-Thermalito Units 1, 3 and 5 refurbishment costs now being included in the Delta Water Charge, which are to be offset with credits and billed through the variable component. Because these refurbishment costs have been billed through the variable component since the April rebill of the 2007 Statement of Charges, the addition of the refurbishment costs to the Delta Water Charge should be offset by an increase in the Oroville power credit. We noted that the Department did not increase the power credit for these charges in the 2010 Statement of Charges, resulting in an increase of \$0.05 per acre-foot in the Delta Water Rate and a \$101,000 increase in Metropolitan's Delta Water Charge. See the REPLACEMENT COSTS section of this report for further discussion of this error and the effect on Metropolitan's 2010 Statement of Charges.
- The 2008 costs decreased by \$2,951,000 due to actual costs being less than what was projected in the 2009 Statement of Charges. FERC relicensing cost estimates included in the prior year Statement of Charges totaled \$3,083,000 while actual costs for 2008, were \$178,000. The adjustment of estimated costs to actual costs resulted in a \$0.05 per acre-foot decrease in the Delta Water Rate and a \$94,000 decrease in Metropolitan's Delta Water Charge.
- Cost projections for 2009 to 2017 increased by \$12,281,000 as the result of the Department updating the estimates for these years. We noted the addition of projected costs for 2009 totaling \$1,262,000 for capital expenditures related to the refurbishment of Hyatt Thermalito Powerplant Units 2, 4 and 6, where none were included in the prior year. In addition, cost estimates were increased by \$10,163,000 for FERC settlement costs and costs were added as follows: \$1,467,000 for replacing protective relays at Hyatt, \$1,395,000 for the portion of the communication system replacement allocated to Oroville, \$1,301,000 for spare draft tubes, stop logs and hoists,

\$1,214,000 for O&M facility expansion and \$728,000 for replacement of the Craig access road bridge. These increases were offset by a decrease of \$5,176,000 for special engineering analysis costs. The decrease in special engineering analysis costs is due to the Department's correction of an error noted in our prior year audit, where these estimates were overstated. The impact of this error correction on Metropolitan's Statement of Charges is discussed further on page 100. These and other less significant changes resulted in an \$0.18 per acre-foot increase in the Delta Water Rate and a \$334,000 increase in Metropolitan's Delta Water Charge.

Delta Facilities: The \$0.15 per acre-foot decrease in Delta Facilities costs is primarily due to the following:

- The 2008 actual costs for the Delta Facilities were lower than the amount projected for the 2009 Statement of Charges, resulting in a \$2,754,000 decrease in costs. The adjustment of the 2008 costs to actual resulted in a \$.05 per acre-foot decrease in the Delta Water Rate and an \$88,000 decrease in Metropolitan's Delta Water Charge.
- Costs for 2009 through 2017 decreased by \$6,371,000 due to the Department updating future projections. The updated projections decreased for the Delta seismic study and Sherman and Twitchell Island fish screens by \$3,867,000 and decreased for special engineering analysis costs by \$2,509,000. These decreases in estimated costs resulted in a \$0.10 per acre-foot decrease in the Delta Water Rate and a \$190,000 decrease in Metropolitan's Delta Water Charge.

North San Joaquin and San Luis: The \$0.01 per acre-foot decrease in North San Joaquin and San Luis costs is primarily due to the following:

- The 2008 costs decreased \$1,836,000 due to the updating of prior year estimates to actual costs. San Luis cost estimates included in the 2009 Statement of Charges were \$2,469,000 while actual costs were \$579,000, which resulted in a \$0.03 per acre-foot decrease in the Delta Water Rate and a \$59,000 decrease in Metropolitan's Delta Water Charge.
- The 2009 to 2017 cost estimates increased by \$1,442,000 as the result of the Department updating its projections for these years. The updated projections include costs for several new projects including \$545,000 and \$1,395,000 to replace Banks and Gianelli Pumping Plants protective relays, respectively, \$1,169,000 for the Gianelli Pumping and Generating Plant discharge line bumphead fabrication and \$664,000 for capital expenditures related to the Delta Fish Agreement. These increases were offset by a \$2,222,000 decrease in special engineering analysis estimates. These and other less significant changes resulted in a \$0.02 per acre-foot increase in the Delta Water Rate and a \$32,000 increase in Metropolitan's Delta Water Charge.

Minimum Component Fluctuations

The minimum component of the Delta Water Rate included in the 2010 Statement of Charges increased by \$7.16 per acre-foot from the December 2008 rebill of the 2009 Statement of Charges, which resulted in a \$13,686,000 increase in Metropolitan's Delta Water Charge. The increase is primarily the result of the following:

Valuation of Recovery Generation: The \$3.37 decrease in the Delta Water Charge is primarily the result of an increase in the valuation of the recovery generation at the Hyatt-Thermalito Power Plant. The increases are due to the following:

- Oroville power revenues for 2000 through 2007 increased by \$13,395,000 due to the Department revising outdated O&M and FERC relicensing costs credited through the Delta Water Charge for historical years. This increase in revenues resulted in a \$0.29 per acre-foot increase in the 2010 Delta Water Rate and a \$563,000 increase in Metropolitan's Delta Water Charge.
- Oroville power revenues for 2008 through 2011 increased by \$29,696,000 due to the Department updating 2008 costs from an estimate to actual costs and revising the O&M and FERC relicensing costs estimates for futures years. This overall increase in revenues resulted in a \$0.46 per acre-foot decrease in the Delta Water Rate and an \$871,000 decrease in Metropolitan's Delta Water Charge.
- The power revenues from 2012 through 2035 increased by \$380,010,000, which offset the future estimated cost increases noted below related to including additional estimates for extraordinary O&M costs, since these costs are billed through the variable component. The increased credits result in a decrease in the Delta Water Rate by \$3.21 per acre-foot and a decrease in Metropolitan's Delta Water Charge of \$6,141,000.

Oroville Division: The increase in the Oroville Division costs resulted in a \$4.29 per acre-foot increase in the 2009 Delta Water Rate. The increase is primarily due to the following:

- Costs for 1999 through 2007 increased by \$3,436,000 due to Hyatt-Thermalito Units 1, 3 and 5 refurbishment costs now being included in the Delta Water Charge as described on page 93. We are unsure as to why some costs were included in the capital component and others in the minimum component. We have inquired of the Department as to the reason for this, but have not received a response. The changes result in an increase of \$0.07 per acre-foot in the Delta Water Rate and \$135,000 in the Metropolitan's Delta Water Charge.
- For 2008, costs increased by \$13,480,000 due to actual costs being higher than what was

projected in the 2009 Statement of Charges. Actual costs charged for FERC relicensing were \$13,000,000, while prior year estimates totaled only \$2,200,000. In addition, actual operating costs were approximately \$5,500,000, while prior year estimates included in the 2009 Statement of Charges were approximately \$3,400,000. This adjustment from estimated to actual costs resulted in an increase of \$0.23 per acre-foot in the Delta Water Rate and \$432,000 in Metropolitan's Delta Water Charge.

- The 2009 and 2010 costs increased by \$15,686,000 due primarily due to an increase in O&M cost projections of \$11,466,000 based on the escalated three-year average historical costs. For the 2010 Statement of Charges, the costs for 2008 replaced 2005 to arrive at the three-year average. Because the total adjusted costs for 2008 are higher than 2005 by \$16,947,000 for the Oroville Division, and 2007 costs increased by \$2,977,000, the three-year historical average increased by \$7,017,000. Other cost increases included \$3,980,000 for the refurbishment of Thermalito Units 2 through 4, \$2,012,000 for control system cost increases, \$786,000 for energy market redesign costs, \$2,167,000 due to a change in the estimates for FERC settlement costs, \$769,000 to seal and pave roads and parking lots, \$761,000 for Thermalito Powerplant wall panel repair and \$576,000 for repairs to the Feather River fish hatchery O&M center road and parking area. These increases are offset by decreases including a 3.31% reduction in labor costs totaling \$1,498,000, resulting from the State-mandated furlough of Department employees, a 5% reduction of O&M costs totaling \$2,087,000 due to the contractors' request for reductions in O&M costs, a reduction in State government pro-rata costs of \$1,018,000, a reduction of \$1,053,000 due to a decrease in the estimates for Bidwell Bridge analysis and coating and a decrease of \$2,570,000 due to the removal of control system refurbishment cost estimates allocated to the Oroville Division. These and other insignificant changes resulted in an increase of \$0.25 per acre-foot in the Delta Water Rate and \$475,000 increase in Metropolitan's Delta Water Charge.
- For 2011, estimates increased by \$18,987,000 primarily due to the increase in O&M cost estimates now being based on escalated historical costs for the last three years, which results in an increase of \$12,059,000. In addition, cost estimates totaling \$458,000 for FERC settlement costs, \$1,154,000 for Hyatt turbine shutoff valve refurbishment and \$2,488,000 for the refurbishment of Thermalito Units 2 through 4 were added for 2011. Cost estimates were increased during the year by \$1,656,000 for operation control costs, primarily remote terminal unit replacement, and \$1,754,000 for costs associated with California Independent System Operator electricity market initiatives and market redesign. These increases were offset by a 5% reduction of O&M costs totaling \$1,044,000 as discussed in the previous paragraph. These changes resulted in an increase of \$0.28 per acre-foot in the Delta Water Rate and \$531,000 increase in Metropolitan's Delta Water Charge.
- The Department increased its cost projections for 2012 to 2035 related to Oroville facilities by

\$418,821,000. The Department included amounts for future extraordinary O&M costs based on 2009 to 2011 amounts, escalated by 1%, that in the past have only been included through 2011. The future additions resulted in an increase of \$3.47 per acre-foot in the Delta Water Rate and a \$6,625,000 increase in Metropolitan's Delta Water Charge.

Delta Facilities: The increase in the Delta Facilities costs, which resulted in a \$5.08 per acre-foot increase in the Delta Water Rate, is primarily due to the following:

- The 2007 and 2008 costs increased by \$7,964,000 primarily due to the erroneous exclusion of the \$3,000,000 credit for 2007 and for 2008 to offset Bay Delta Conservation Plan (BDCP) charges that are included in Delta reaches. Because the BDCP charges are collected through the transportation minimum component on Attachment 9 of the Statement of Charges, a credit should be included in the Delta Water Rate calculation. See page 99 for further discussion. The remaining increase of \$1,964,000 is primarily due to estimates for the prior year being lower than actual costs incurred for 2008. These increases resulted in a \$0.14 per acre-foot in the Delta Water Rate and a \$259,000 increase in Metropolitan's Delta Water Charge.
- The 2009 to 2010 costs increased by \$3,130,000 due primarily due to an increase in O&M cost projections of \$5,683,000 based on the escalated three-year average of historical costs. For the 2010 Statement of Charges, the costs for 2008 replaced 2005 to arrive at the three-year average. Because the total adjusted costs for 2008 are higher than 2005 by \$7,946,000 for the Delta Facilities, and 2006 and 2007 costs increased by \$1,852,000 and \$5,075,000, respectively, the three-year historical average increased by \$4,452,000. Costs also increased by \$2,820,000 for Delta mitigation land purchases. These increases are offset by decreases including a 3.31% reduction in labor costs totaling \$1,626,000 as previously discussed, a 5% reduction of O&M costs totaling \$2,266,000 as previously discussed and a reduction in State government pro-rata cost allocations of \$1,208,000. These and other insignificant changes resulted in an increase of \$0.05 per acre-foot in the Delta Water Rate and \$93,000 increase in Metropolitan's Delta Water Charge.
- For 2011, estimates increased by \$15,979,000 primarily due to the increase in O&M cost estimates now being based on escalated historical costs for the last three years, which results in an increase of \$15,702,000. In addition, cost estimates totaling \$1,410,000 for Delta mitigation land purchases were added for 2011. These increases were offset by a 5% reduction of O&M costs totaling \$1,133,000 as previously discussed. These changes resulted in an increase of \$0.23 per acre-foot in the Delta Water Rate and \$447,000 increase in Metropolitan's Delta Water Charge.
- The Department increased its cost projections for 2012 to 2035 related to Delta Facilities by \$541,905,000. The Department included amounts for future extraordinary O&M costs based on 2009 to 2011 amounts, escalated by 1%, that in the past have only been estimated through 2011.

The future additions resulted in an increase of \$4.66 per acre-foot in the Delta Water Rate and \$8,917,000 increase in Metropolitan's Delta Water Charge.

North San Joaquin and San Luis: The \$1.15 per acre-foot increase in North San Joaquin and San Luis costs is primarily due to the following:

- For 1999 to 2005, costs decreased by \$6,964,000 due to a change in methodology for calculating the downstream allocation of costs when the Department began using the SAP CARA system to perform the calculation that results in reservoir storage changes associated with San Luis being improperly excluded from the downstream calculation. This error is discussed further in the DOWNSTREAM DISRIBUTION OF COSTS section of the report. The change in methodology resulted in a decrease of \$0.12 per acre-foot in the Delta Water Rate and \$236,000 decrease in Metropolitan's Delta Water Charge.
- The 2006 and 2007 costs decreased by \$4,011,000 due to adjustments made to the San Luis power costs resulting from revisions to the PALPOCs for these years. These adjustments resulted in a \$0.07 per acre-foot decrease in the Delta Water Rate and a \$135,000 decrease in Metropolitan's Delta Water Charge.
- Costs for 2008 decreased \$3,351,000 due to the updating of estimated costs to actual costs. San Luis cost projections included in the 2009 Statement of Charges were \$21,195,000, while actual costs are \$17,844,000. This revision resulted in a \$0.06 per acre-foot decrease in the Delta Water Rate and a \$107,000 decrease in Metropolitan's Delta Water Charge.
- The 2009 and 2010 costs decreased by \$18,706,000 due primarily to a decrease of O&M cost projections of \$9,442,000 based on escalated three-year average historical costs. For the 2010 Statement of Charges, since the 2006 and 2007 historical costs used in the three-year average decreased by \$5,072,000 and \$5,367,000, respectively, the three-year average decreased \$3,680,331. Other cost decreases included \$10,279,000 for the Gianelli Pumping and Generating Plant butterfly valve refurbishment and \$775,000 for aqueduct liner repairs at mile post 14.85 due to the deferral of the projects to 2011. The cost estimates for the seismic retrofit of bridges in the San Luis Field Division, costs to seal and coat aqueduct roads and costs for aqueduct liner repairs at reach 3 also decreased by \$773,000, \$1,228,000, and \$651,000, respectively, due to reduced estimates for these projects in the 2010 Statement of Charges. Other cost decreases were due to a 3.31% reduction in labor costs totaling \$626,000 as previously discussed, a 5% reduction of O&M costs totaling \$873,000 as previously discussed, and a reduction in State government pro-rata cost allocations of \$645,000. These cost decreases were offset by increases due to the addition of cost estimates totaling \$1,116,000 for Bay-Delta extraordinary costs including Delta fish facility improvement projects and fishery survival improvement projects under the 2004 and 2009 National Oceanic and Atmospheric Administration Operation Criteria and Planning

Biological Opinion, \$1,437,000 for operation control system projects, \$1,730,000 for turbine, pump casing and draft tube refurbishment and \$439,000 for energy market redesign costs. Costs also increased by \$1,158,000 due to changes in reservoir storage, which increased downstream costs in the 2010 Statement of Charges. These and other insignificant changes resulted in a decrease of \$0.29 per acre-foot in the Delta Water Rate and \$546,000 in Metropolitan's Delta Water Charge.

- For 2011, estimates increased by \$14,076,000 primarily due to the increase in butterfly valve refurbishment costs by \$7,019,000 and increased estimates for liner repairs at mile post 14.85 by \$1,499,000 due to the delay in the start of the projects from fiscal year 2010 to 2011. Other cost increases were due to the addition of cost estimates for Bay Delta extraordinary cost totaling \$719,000 as described in the preceding paragraph, \$1,001,000 for energy market redesign activities, \$945,000 for operation control system projects and \$865,000 for turbine, pump casing and draft tube refurbishment. Costs also increased by \$2,555,000 due to a change in the estimates for downstream costs in the 2010 Statement of Charges. These cost increases were offset by a decrease in the O&M projections by \$1,103,000 due to the cost estimates now being based on escalated average historical costs for the last three years. These and other insignificant changes resulted in a \$0.21 per acre-foot increase in the Delta Water Rate and a \$394,000 increase in Metropolitan's Delta Water Charge.
- The Department increased its cost projections for 2012 to 2035 related to North San Joaquin and San Luis facilities by \$175,149,000. The Department included amounts for future extraordinary O&M costs, as previously discussed. The future additions resulted in an increase of \$1.51 per acre-foot in the Delta Water Rate and \$2,894,000 increase in Metropolitan's Delta Water Charge.

The Department did not use the SAP system to compute the Delta Water Charge for the 2010 Statement of Charges due to problems with the program. Instead, the calculation was prepared outside of the SAP system. We were able to recompute the Delta Water Charge using the cost data in Bulletin 132-09 Tables B-10 and B-11, so the Delta Water Rate calculation used for the Statement of Charges appears to be correct.

Bay Delta Conservation Plan

The Department did not include credits of \$7,500,000 for 2007 to 2009 in the Delta Water Charge for Bay Delta Conservation Plan charges that are already included on Attachment 9 of the 2007 through 2009 Statements of Charges and collected through the transportation minimum component, resulting in these costs being double billed. This oversight by the Department results in an overstatement of the Delta Water Rate by \$0.12 and an overstatement of Metropolitan's Delta Water Charge by \$242,000 in the 2010 Statement of Charges. We discussed the exclusion of these credits with the Department and we anticipate that the error will be corrected in the rebill of the 2010 Statement of Charges.

Assessment of Historical Costs

During our review of changes in historical years' costs in the Oroville Division, we noted that the Department had assessed costs for several cost objects that had not previously been allocated to the contractors. The amounts, all relatively minor, appeared to be appropriately charged to the contractors except for the PCL litigation costs related to the Monterey Amendment and costs related to a 4th of July event. The PCL litigation charges were assessed to reaches State-wide but have also been billed separately through the transportation minimum component. The effect to Metropolitan of this double billing is discussed in the FUTURE COSTS section of this report. The costs related to the 4th of July event, which totaled \$41,000, were allocated to an Oroville reach and included in the Delta Water Charge, when these costs do not have a water supply purpose. The inclusion of these costs results in an overstatement of Metropolitan's Delta Water Charges of \$1,000. We inquired of the Department why these costs that were incurred in 2007 were recently allocated to the contractors but received no response. We will follow up on this error in our audit of the 2011 Statement of Charges.

Outdated Entitlement Water

The present value of water used to calculate the Delta Water Rate was based on Bulletin 132-08 Table B-4 entitlement water instead of the 132-09 Table B-4 entitlement water. The use of the outdated entitlement water results in a \$0.01 overstatement of the Delta Water Rate and a \$30,000 overbilling to Metropolitan's Delta Water Charge in the 2010 Statement of Charges.

Special Engineering Analysis

Our prior year audit disclosed that the special engineering cost estimates for 2008 through 2013, included in the 2009 Statement of Charges, were overstated by \$63,928,000 in the calculation of the Delta Water Charge and transportation capital components. The Department corrected this error for the 2010 Statement of Charges, which reduced Metropolitan's Delta Water Charge and transportation capital components by \$454,000 and \$789,000, respectively.

Oroville Facilities

Value of Recovery Generation. The debt service and O&M costs of Hyatt-Thermalito and Thermalito Diversion Dam Powerplants are used to value the energy produced at these Powerplants, and are billed to the contractors through the variable component. Since the capital and O&M costs are included in the Delta Water Charge computation, the Department records a credit in the Delta Water Charge for the value of this recovery generation energy. During our audit of these recovery generation credits and charges, we noted the following items:

- The 1998 Hyatt-Thermalito O&M costs included in the calculation of the variable component and the Delta Water Charge are overstated by \$1,616,000 due to the use of estimated rather than

actual O&M costs. The effect of this error is to overstate Metropolitan's transportation variable and minimum components by \$682,000 and \$87,000, respectively, and to understate Metropolitan's Delta Water Charge by \$81,000 in the 2010 Statement of Charges. The Department does not plan to adjust for 1998 power costs. However, since the discrepancy is significant, especially when combined with other variable component errors, we will pursue correction with the Department.

- The 1999, 2000 and 2004 to 2008 Hyatt-Thermalito O&M costs included in the computation of the Delta Water Charge component are understated by a total of \$219,000 in the Delta Water Charge calculation, and the variable component calculation is overstated by \$4,919,000 due to the Department not using actual O&M costs, even though actual cost information has been summarized by the accounting staff for these years. As a result, Metropolitan's variable component is overstated by approximately \$5,172,000 and the Delta Water Charge is understated by approximately \$26,000 in the 2010 Statement of Charges. The Department has indicated that these costs will be updated when the final power allocations are completed for these years. Although differences remain between actual O&M charges included in the Delta Water Charge and actual costs per SAP, the Department corrected a significant portion of the prior year differences. The corrections resulted in a \$250,000 increase in Metropolitan's Delta Water Rate in the 2010 Statement of Charges.
- FERC relicensing costs for 1999 through 2008 were overstated by \$99,000 in the computation of the variable component and 1999 and 2008 were understated by \$322,000 in the Delta Water Rate calculation due to the Department using outdated costs. As a result, Metropolitan's variable charge, including interest, is overstated by \$611,000 and the Delta Water Charge is overstated by approximately \$16,000 in the 2010 Statement of Charges. These costs will be updated when the final power allocations are completed for these years. Although differences remain between actual FERC charges included in the Delta Water Charge and actual costs per SAP, the Department corrected a significant portion of the prior year differences. The corrections resulted in a \$34,000 increase in Metropolitan's Delta Water Rate in the 2010 Statement of Charges.
- We compared the Hyatt-Thermalito charge included in the variable component to the credit included in the Delta Water Charge and noted that the credit included in the Delta Water Rate computation was less than the charge in the variable component by \$855,000 for 2009 and by \$766,000 for 2010. This understatement of the credits included in the Delta Water Charge results in an overstatement of Metropolitan's Delta Water Charge by approximately \$51,000 in the 2010 Statement of Charges. We informed the Department of this difference but received no response. We expect that this error will be corrected in the computation of the 2011 and 2012 Statement of Charges when these 2009 and 2010 charges and credits will be adjusted to actual.

- In prior years' audits, we reported that the Thermalito Diversion Dam capital credits totaling approximately \$35 million for 1987 to 2035 had been erroneously excluded from the Delta Water Rate computation. During our 2005 audit, the Department indicated that Thermalito Diversion Dam credits totaling \$9,556,000 for 1987 to 1999 were included during the conversion to SAP and that for 2000 to 2035, credits totaling \$27,339,000 were included as part of the O&M estimated costs. However, the Department has not provided the documentation for us to verify that these costs were included in SAP. Based on our recalculation of the credits included in the Delta Water Charge for historical years, it appears that the Thermalito Diversion Dam credits are being properly included. We noted that O&M cost estimates, which the Department has indicated to us includes the Thermalito Diversion Dam capital credits, are included as a credit in the Delta Water Charge minimum component, so it would appear that the Thermalito Diversion Dam capital credits for future years are being properly included in the Delta Water Charge. However, if the Thermalito Diversion Dam amounts are included in the O&M cost estimates, then these amounts would appear to be included in the variable charges twice for 2009 and 2010 because the variable charge includes amounts for both Oroville O&M costs and Thermalito Diversion Dam capital costs. The result is to overstate variable costs for 2009 and 2010 by \$1,531,000, which overstates Metropolitan variable component by \$1,225,000 in the 2010 Statement of Charges. We have requested that the Department provide a detail of the future cost estimates separately identifying the Powerplant and Diversion Dam amounts.

Future Additional Facilities

As mentioned in prior reports, the Delta Water Rate is calculated based upon Table A water. Additional Delta facilities will need to be built in future years if all Table A deliveries are to be made. However, the costs used to compute the Delta Water Rate do not include costs to build or maintain these additional facilities. Thus, there is an inconsistency in the computation of the rate because the cost of these facilities needs to be included in the calculation or Table A water should be reduced to match available capacity. If this inconsistency were eliminated, as these costs are added in future years, the Delta Water rate would increase significantly.

Oroville Settlement Costs

In the 2010 Statement of Charges, the Department included approximately \$16.1 million of preservation costs from the Oroville Settlement as charges to the Delta Water Charge minimum component. The Contractors and the Department have formed a workgroup to evaluate whether a portion of these costs should be treated as Oroville power costs and billed through the transportation component. We will continue to work with Metropolitan and the Department to determine the proper classification of these costs.

OPERATIONS

Our examination of O&M costs focused on large expenditures greater than \$350,000. We determined that all costs examined have been properly charged to the contractors, except for the North Delta Conveyance program costs noted below.

During a prior year examination, we noted that the acquisition costs of easements were not consistently capitalized. Our position on easements is that they should be coded to a capital cost center rather than to a minimum cost center. We noted an easement purchase in 2005, totaling \$600,000, was incorrectly coded to a minimum cost center; however, there was no affect on Metropolitan's Statement of Charges because the cost was coded to the Delta Water Charge, where both the capital and minimum components are amortized over the remaining life of the Project. The Department's Internal Audit Division has recommended that the Department ensure consistency in the recording of easements. Although the coding of this 2005 easement purchase has not been corrected, we noted no new easement purchases in 2008 that were incorrectly coded to a minimum cost center. We will continue to monitor this situation.

We noted costs totaling \$4,112,000 related to a Delta cross channel pilot study were being allocated statewide instead of to the Delta reaches. The incorrect allocation of costs results in a \$150,000 understatement of Metropolitan's 2009 Delta Water Charge and a \$2,673,000 overstatement of Metropolitan's 2009 transportation minimum component. We have provided a list of the costs that appear to be misclassified to the Department and they have indicated that they will evaluate whether they believe the allocation of these costs is proper. We will monitor these costs to ensure that the corrections are made.

Comparison of O&M Expenditures Between Fiscal Years

The following schedule identifies the O&M expenditures by division for the calendar year ended December 31, 2008, and compares these amounts with those of the prior calendar year.

COMPARISON OF ACTUAL OPERATIONS AND MAINTENANCE EXPENDITURES

	2007		2008		Change Amount
	Amount	Percentage of Total	Amount	Percentage of Total	
North San Joaquin Division	\$ 13,567,829	6.1%	\$ 18,144,074	7.1%	\$ 4,576,245
San Luis Division	11,980,234	5.4%	15,823,589	6.2%	3,843,355
South San Joaquin Division	29,823,451	13.4%	38,444,323	15.1%	8,620,872
Tehachapi Division	15,833,488	7.1%	23,596,971	9.3%	7,763,483
Mojave Division	26,021,796	11.7%	25,054,139	9.8%	(967,657)
Santa Ana Division	12,333,618	5.5%	11,921,393	4.7%	(412,225)
West Branch	40,114,522	18.0%	33,260,425	13.1%	(6,854,097)
East Branch Enlargement					
Mojave Division	1,401,707	0.6%	1,010,772	0.4%	(390,935)
Santa Ana Division	2,575,425	1.2%	2,686,936	1.1%	111,511
Oroville Water Supply					
and Power Costs	19,966,391	9.0%	27,011,162	10.6%	7,044,771
Delta Facilities	35,533,947	16.0%	37,633,527	14.0%	2,099,580
Suisun Marsh	3,378,623	1.5%	1,993,230	0.8%	(1,385,393)
California Aqueduct					
Conservation Reaches	10,103,022	4.5%	17,843,775	7.0%	7,740,753
	<u>\$ 222,634,053</u>	<u>100.0%</u>	<u>\$ 254,424,316</u>	<u>100.0%</u>	<u>\$ 31,790,263</u>
PERCENTAGE CHANGES					
FROM PRIOR YEAR		<u>9.0%</u>		<u>14.3%</u>	

There were a number of O&M expenditures that, by division, varied by more than plus or minus \$1,000,000 between 2007 and 2008. The total net increase was approximately \$31,790,000. The overall percentage increase is 14.3% compared to a 9.0% increase last year. The following is a summary of the more significant causes of the variances in these O&M costs:

Reason for fluctuation	Amount of Increase/ (Decrease)
Increase for energy market redesign and technology upgrade (MRTU)	\$ 7,318,000
Increase in expenditures at South San Joaquin O&M costs	5,444,000
Increase in expenditures Oroville Division O&M costs	5,377,000
Increase in expenditures for Gorman Creek Repairs	4,882,000
Increase in expenditures for Lodi Energy Center planning costs	4,824,000
Increase in expenditures at Conservation reaches of the California Aqueduct	4,433,000
Increase in expenditures at North San Joaquin Division O&M costs	2,845,000
Increase in expenditures at San Luis Division O&M costs	2,724,000
Increase in expenditures at Tehachapi Division O&M costs	1,942,000
Increase in expenditure for centralized control system migration	1,903,000
Increase in expenditures Delta Facilities projects	1,589,000
Decrease in expenditures at Suisun Marsh projects	(1,311,000)
Decrease in expenditures at Mojave Division O&M costs	(1,528,000)
Decrease in expenditures at West Branch Division reservoir storage change and O&M costs	(11,040,000)
Unexplained	2,388,000
Net Increase	<u>\$ 31,790,000</u>

MRTU Project: In 2007, the CAISO began its energy Market Redesign and Technology Upgrade (MRTU). The CAISO is redesigning California's grid reliability markets and replacing its computer systems. The main components of the MRTU is to create a more transparent, efficient and reliable wholesale energy market structure. Expenditures in 2007 were \$1.2 million and in 2008 were \$9.3 million, an increase of \$7.3 million.

South San Joaquin Division: The increase of \$5.4 million in the South San Joaquin Division is mainly due to a \$2.3 million increase in costs for the refurbishment of Unit 10 at the Buena Vista Pumping Plant and a \$0.9 million increase for the refurbishment of Unit 5 at the Wind Gap Pumping Plant. In addition, transformer, breaker, and discharge valve seats replacement costs increased by \$0.9 million from the prior year at Buena Vista Pumping Plant and \$0.5 million at Wheeler Ridge Pumping Plant. These increases were in addition to an increase in costs of \$0.8 million for recoating the interior of the discharge lines at the Teerink Pumping Plant.

Oroville Division: The increase in Oroville Division O&M costs, which totaled \$5.4 million, is primarily the result of a \$4.6 million increase in costs incurred for projects related to FERC re-licensing. In addition, there was an overall increase of \$1 million at Thermalito Powerplant, which consisted of a \$0.4 million increase for refurbishment of Unit 4, \$0.4 million for switch gear refurbishment, and \$0.7 million related to protective relay and low voltage breaker refurbishment and replacement, which was offset by a \$0.5 million decrease in operations activities. There was a \$1.1 million overall increase in costs at Hyatt Powerplant, which consists of a \$0.5 million increase for shutoff valve refurbishment, \$0.6 million for chiller replacement, \$0.3 million for low voltage breaker refurbishment, and \$0.3 million for efficiency testing, which was offset by a \$0.6 million decrease in refurbishment costs related to Unit 6. These increases were offset by a decrease in costs for the 1993 recreation plan facilities contract of \$1.0 million and a \$0.3 million decrease for paving and sealing of roads.

Gorman Creek Repairs: In 2007, a project began at Gorman Creek for the demolition of the existing concrete channel, compaction of the channel foundation and placement of a new reinforced concrete channel, the cost of which totaled \$4 million in 2007 and \$8.9 million in 2008. The Gorman Creek improvement channel repairs appear to meet the qualification for capitalization. See the CAPITAL COSTS section of this report where we discuss that these costs appear to be capital in nature instead of O&M.

Lodi Energy Center: In 2008, the Department expended \$4.8 million on the Lodi Energy Center Phase II, whereas no expenditures on phase II occurred in 2007. Phase II consists of the planning and development activities of the Lodi Energy Center and attaining project-required emission reduction credits (ERC's). The Department's cost classification policy states that planning work done before the construction project is officially authorized are charged as annual O&M costs. When a project becomes an officially-authorized construction project, the planning costs will be capitalized and this amount will be credited to

annual O&M costs. We will monitor the treatment of these costs in future audits as this project progresses and the costs are subsequently capitalized.

California Aqueduct – Conservation Reaches: The increase in California Aqueduct – Conservation Reaches, which totaled \$4.4 million, is primarily due to increases resulting from updates of San Luis power costs due to revised PALPOC's, which increased costs \$1.3 million. Also, Barker Slough Pumping Plant Unit 3 refurbishment costs increased by \$0.8 million, Delta Field Division Area Control Center Operation costs increased \$0.2 million and grid management charges from CALISO increased \$0.2 million. Sisk Dam has been classified as a high-hazard structure by the "Seismic Deformation Analysis". Seismic and geologic re-evaluation costs have been incurred in order to evaluate risk reduction for Sisk Dam, causing costs to increase by \$0.8 million in 2008. An additional increase was the result of \$0.2 million increase in State Government pro rata charges. Costs also increased due to a credit that was recorded in 2007 for non-contractors wheeling charges of \$1.1 million, whereas no similar credits were recorded in 2008. These increases were offset by a decrease for the sealing and paving of roads at the Fish Facility of \$0.2 million.

North San Joaquin Division: Costs allocated to the North San Joaquin Division increased by \$2.9 million primarily due to a \$1.8 million increase for inspection, refurbishment and replacement of parts for Unit 3 at Banks Pumping Plant. Other increases were due to additional staffing costs of \$0.2 million for planning and scheduling duties, O&M Center operations cost increases of \$0.2 million and annual compliance certification and water treatment plant inspection cost increases of \$0.5 million. In addition, costs increased due to a credit that was recorded in 2007 for non-contractor wheeling charges of \$0.7 million, whereas no similar credits were recorded in 2008. These increases were offset by a decrease in costs for sealing and paving roads at the Fish Facility of \$0.5 million.

San Luis Division: The \$2.7 million increase in costs at the San Luis Division is due to the canal liner repairs, due to more work occurring in 2008 than in 2007.

Tehachapi Division: Costs allocated to the Tehachapi Division increased by \$1.9 million primarily due to Edmonston Pumping Plant costs increasing \$2.6 million for major refurbishment of Unit 7. These increases were offset by a \$1.0 million decrease due to Edmonston Pumping Plant Unit 6 work being completed in 2007.

Centralized Control System Migration (CCSM): CCSM Phase II design costs increased by \$1.9 million for Remote Terminal Unit upgrades, software, hardware, design, Supervisory Control and Data Acquisition (SCADA), a software application program used for process control and to gather real time data from remote locations. Expenditures in 2007 were \$0.1 million and \$2 million in 2008.

Delta Facilities: Delta Facilities costs increased overall by \$1.6 million in 2008 resulting from the following increases:

• Project Management	\$1.8 million
• California Water Resources Simulation planning and hydrology model development, including Bay-Delta Office engineering support	2.7 million
• Delta sonar treatment	0.9 million
• Delta levee implementation	0.7 million
• U.S. Fish and Wildlife Service monitoring for compliance	0.7 million
• South Delta bed sedimentation monitoring	0.6 million
• Overall increase in interagency ecological program including estuary monitoring,	0.5 million
• Bay Delta Conservation Plan (Department staff)	0.5 million
• State Water Project water transfer evaluation	0.4 million
• State Water Project monitoring information management	0.3 million

These increases were partially offset by the following decreases:

• Temporary Barriers Program	(1.1 million)
• Delta Facilities planning	(0.9 million)
• Delta Risk Management Strategy Program	(0.8 million)
• Planning Model Development	(0.8 million)
• Delta Modeling	(0.7 million)
• Field data collection	(0.7 million)
• South Delta improvement permit acquisitions	(0.6 million)
• Final environmental impact report	(0.5 million)
• Pelagic organism research aquatic toxicity research	(0.5 million)
• Delta O&M	(0.5 million)
• State Water Project future supply, Sacramento River Phase B	(0.4 million)

Suisun Marsh: O&M costs at Suisun Marsh decreased by \$1.3 million between 2007 and 2008. The decrease is primarily the result of the Department reflecting \$1.7 million of payments from the USBR in 2008, where none were posted in 2007. The \$0.4 million increase in Water Resource Control Board Compliance Monitoring costs offset a portion of this decrease.

Mojave Division: Costs at the Mojave Division decreased by \$1.5 million primarily due to a reduction of costs at Alamo Powerplant for repairs to turbine Unit 1 of \$0.8 million and refurbishment of 23 field poles of \$0.6 million. Pearblossom Pumping Plant costs decreased \$0.7 million due to completed repairs of Units 3 and 8 and decreased \$0.3 million resulting from repairs of discharge line 2. These decreases were offset by increases of \$0.4 million in costs to repair three roofs at Pearblossom Pumping Plant and an increase in expenditures for the sealing and paving of roads of \$0.5 million.

West Branch Division: West Branch Division costs decreased by \$11 million in 2008. This decrease is primarily due to a \$11.8 million reduction in the downstream reallocation of energy costs due to changes in reservoir storage levels. This downstream reallocation between 2007 and 2008 is primarily due to Castaic Lake being drawn down in 2008 compared to being refilled in 2007. Castaic Lake was refilled in 2007 by 117,880 acre-feet, while in 2008 Castaic Lake was drawn down by 14,279 acre-feet, resulting in a \$11.8 million decrease between 2007 and 2008. We determined in our testing of the water loss assessments that there were posting errors and data was excluded in the calculation. We quantified the impact of these errors in the DOWNSTREAM DISTRIBUTION OF COSTS section of this report. This decrease due to the downstream reallocation was offset by an increase in expenditures at Oso Pumping Plant of \$0.4 million for roof repairs and \$0.4 million for Unit 2 discharge valve and pump case refurbishment.

DELTA FISH AGREEMENT

Background. An agreement was signed between the Department and the Department of Fish and Game (DFG) on December 30, 1986 to provide payments to offset fish losses caused by operations in the Delta. The Department believes this Delta Fish Agreement (Agreement) was necessary to enable them to add four additional pumps to the Banks Pumping Plant without further resistance from the DFG. Under terms of the original Agreement, the Department was required to expend \$15,000,000 for fishery improvement projects to mitigate past fish losses by December 29, 1995. The 1986 Agreement was amended to extend the period through which the Department can expend the remainder of the \$15 million to December 31, 2007. This Agreement provides for the replacement or offset of annual direct losses of striped bass, salmon and steelhead at the Banks Pumping Plant since 1986. As of March 2008, the Department had replaced 9,405,704 more salmon smelt than is required under the Agreement, and must replace 79,098 more striped bass under the Agreement. The Department did not provide current information on fish losses or replacements.

The Department is currently negotiating to amend the 1986 Agreement for a fourth time; however, the contractors have informed the Department that they are unable to support the proposed amendment and will oppose efforts by the Department to fund the activities described in the amendment. In the preparation of the 2009 Statement of Charges, the Department included \$20 million each year from 2009 to 2018 to pay for new projects and expenditures related to mitigation for species not included in the original amendment and for the acquisition of mitigation lands as described in the proposed amendment, but the amounts were removed in the 2009 rebill. No amounts have been included in the 2010 Statement of Charges for this fourth amendment, except for mitigation land purchases totaling \$4.2 million.

Cost Allocation

The costs of this Agreement are being reimbursed by the contractors through the Delta Water Charge capital, transportation capital and transportation variable cost components of the Statement of Charges, in the following manner:

Capital. The Department began to collect the \$15,000,000 for initiating the program through the capital component at the Banks Pumping Plant beginning in the 1988 Statement of Charges. These costs are amortized and collected from the contractors through 2035. The computation of the 2010 Statement of Charges capital component includes \$13,463,000 of actual expenditures through 2007 and \$2,217,000 of estimated costs for 2009 to 2011. These costs exceed the \$15 million specified in the agreement by \$860,000. As of our prior year audit, the DFG's Fish Advisory Committee, who approves projects for this \$15 million program, had identified projects that would utilize all unexpended monies under this capital improvements program, such as the Deer Creek Water Exchange, Merced River Salmon Habitat

Enhancement, and the Stanislaus River Spawning Habitat and Flood Plain Restoration projects. A current year list was not yet available from the Department.

Variable. The costs recovered under the variable component consist of programs relating to the direct replacement of fish losses. The actual costs incurred to date on the various programs total \$37,058,000 as of December 2008. The variable fish replacement charges are determined annually in a calculation that uses actual historical expenditures and future projected expenditures and distributes the costs among years based upon the water pumped through the Banks Pumping Plant by developing a unit rate to recover variable fish replacement costs. This rate is computed using the present worth of net fish replacement costs as of 1985 and the present worth of SWP water through the Banks Pumping Plant.

In the past, the Department calculated a fish replacement charge by multiplying the calculated unit rate by the water through Banks Pumping Plant, resulting in a charge that was added to the Banks Pumping Plant costs in B-3, prior to calculating the B-17 variable unit rates. However, in the 2009 and 2010 Statements of Charges, the Department added the fish replacement unit rate to the B-17 variable unit rates, which we believe does not leave an adequate trail for calculation of the B-17 rates using costs in B-3. We will recommend that the fish replacement charge be added to other variable energy costs assigned to the plant, as it has been done in the past.

Although the Department prepared fish replacement charge calculations for 2009 and 2010, this information was not used in the preparation of the Statements of Charges. Instead, the unit rate calculated for the rebill of the 2008 Statement of Charges was used for 2009 and the unit rate calculated for the 2009 Statement of Charges was used for 2010. Because the charge calculated using the unit rate from the 2008 rebill is lower than the revised 2009 charge calculated from the fish replacement charge calculation, Metropolitan's 2009 variable charge is understated by \$18,000. Because the 2009 rate was used instead of the 2010 rate, Metropolitan's 2010 variable charge is understated by \$87,000. We calculated these errors using data provided by the Department that supports Table B-3. However, the Department used Table B-12 instead of Table B-3 to compute the variable unit rates and we were not provided support for Table B-12. As a result, we were unable to determine what fish replacement charges were included in B-12 and hence included in the Statement of Charges. We requested this information from the Department but received no response. We will continue to request this information from the Department.

Prior year audits of the Department's variable fish replacement computation disclosed that actual contractor payment amounts were not used in calculating the fish replacement charges, wheeling credits were outdated or excluded from the computation and the water through the Banks Pumping Plant used in the calculation did not agree to Table B-6. In addition, while testing the clerical accuracy of the 2010 calculation, we noted that due to an error in the Department's spreadsheet, the present value of water used

to calculate the unit rate was incorrect. As a result, Metropolitan's variable component included in the 2010 Statement of Charges is understated by \$853,000. We will continue to work with the Department to resolve these differences.

CAPITAL COSTS

We examined the supporting documentation of major capital cost expenditures which were greater than \$500,000 and affected Metropolitan's Statement of Charges. Except as noted below, we determined all expenditures appeared properly supported, authorized and allocated within the Department's cost accounting system.

In our testing we noted the Department coded certain expenditures as replacement items that were not on the Master Replacement Items List. We will recommend to the Department that the Master Replacement Items List be re-evaluated and updated to include replacement items not listed.

We noted items that were allocated through the minimum component that appeared to meet the criteria for capitalization. The Department indicated that these additions are considered O&M costs that are billed through the minimum component because they are not considered new construction, but are actually repairs of existing structures or equipment, or the initial cost estimate was below \$200,000 although actual expenditures were significantly higher. A State Water Contractors work group consisting of Department and water contractor representatives were discussing modifications to clarify the existing capitalization policy, but this project is currently on hold. When a revised capitalization policy is available, we will re-evaluate whether these types of items should be capitalized in the future.

In September 2007, the Department determined that an 11,000 foot section of the Gorman Creek Improvement Channel was unsafe for continued operation. A project began for the demolition of the existing concrete channel, compaction of the channel foundation and placement of a new reinforced concrete channel. The Department included \$13,124,000 of actual costs and \$250,000 of estimated costs for Gorman Creek Improvement Channel emergency repairs in the transportation minimum component of the 2010 Statement of Charges. The Department considers the inclusion of these costs in the transportation minimum component proper because they believe that the repair work is to bring the facility back to normal conditions and not a betterment. The water supply contracts indicate that repairs to transportation facilities can be financed by revenue bonds and the description of the Gorman Creek Improvement Channel repairs appear to meet the qualifications for capitalization as included in Accounting Systems Bulletin 83. This bulletin defines betterment as an addition to, or improvement of an existing facility which may or may not involve the retirement of all, or a portion of, the existing facility. The betterment must have a useful life of three years or greater and a cost of \$200,000 or greater. The inclusion of these costs in the 2010 Statement of Charges overstates Metropolitan's transportation minimum component by \$12,049,000 and understates the transportation capital component by \$773,000. We will continue to work with Metropolitan and the Department to resolve the classification of these costs.

The Department incurred \$3.4 million of costs in 2005, 2006, and 2007 for recreation and fish and wildlife projects at the Lake Perris Reservoir, such as sand and swim beach expansion, an ADA fish site, marina repair and an irrigation system for park vegetation. These expenditures were to facilitate easy access for park users to the water for recreation, and maintain and enhance wildlife habitat due to the reservoir level being lowered to address public safety concerns related to the stability of Perris Dam in event of a major earthquake. These costs were being allocated as multi-purpose costs, 94.3% to the water supply Project purpose and 5.7% for recreation, rather than 100% to the recreation Project purpose. As the expenditures have no apparent transportation water supply purpose, the Department made a correction to reallocate \$2.1 million of these costs from a transportation cost center reach to a recreation cost center, with the exception of the costs related to the irrigation system, which Metropolitan concurs should be billed to the contractors under the transportation capital component. As a result of this correction, Metropolitan's transportation capital component decreased by \$125,000 in the 2010 Statement of Charges. However, after making these corrections, we noted an additional \$325,000 of recreation-related capital costs continue to be allocated to the contractors, resulting in the overstatement of Metropolitan's calculated capital component in the 2010 and future Statements of Charges by \$19,000 per year. We will continue to monitor these costs to ensure they are removed from contractor billings.

The Department incurred \$2.0 million in litigation settlement costs related to a condemnation lawsuit involving the San Luis Canal and Arroyo Pasajero Flood Control Improvement Project. Costs incurred at San Luis have a joint Project purpose split, resulting in 55% of the costs being billed to the contractors, with the remaining 45% being billed to the United States Bureau of Reclamation. However, we noted that the contractors were allocated only 51% of the settlement cost instead of the 55%, as a result of the Department allocating costs manually rather than allocating the costs through the cost center system. This allocation error understates Metropolitan's capital component in the 2010 and future Statements of Charges by \$2,000 per year.

Comparison of Capital Expenditures Between Fiscal Years

The following schedule identifies the capital expenditures by division for the calendar year ended December 31, 2008, and compares these amounts with those of the prior calendar year.

COMPARISON OF ACTUAL CAPITAL EXPENDITURES

	2007		2008		Change Amount
	Amount	Percentage of Total	Amount	Percentage of Total	
North San Joaquin Division	\$ 595,435	2.7%	\$ 1,047,878	4.7%	\$ 452,443
San Luis Division	271,406	1.2%	1,333,373	6.0%	1,061,967
South San Joaquin Division	446,861	2.0%	433,327	2.0%	(13,534)
Tehachapi Division	4,006,081	18.0%	879,075	4.0%	(3,127,006)
Mojave Division	1,635,879	7.4%	5,940,884	26.9%	4,305,005
Santa Ana Division	4,952,835	22.3%	2,670,101	12.1%	(2,282,734)
West Branch	2,667,703	12.0%	3,649,178	16.5%	981,475
Oroville Water Supply and Power Costs	6,411,230	28.8%	4,985,468	22.6%	(1,425,762)
Delta Facilities	829,981	3.7%	842,799	3.8%	12,818
Suisun Marsh	5,928	0.0%	(442,987)	-2.0%	(448,915)
Los Banos Grande	47,543	0.2%	25,394	0.1%	(22,149)
California Aqueduct Conservation Reaches	379,596	1.7%	724,111	3.3%	344,515
	<u>\$22,250,478</u>	<u>100.0%</u>	<u>\$ 22,088,601</u>	<u>100.0%</u>	<u>\$ (161,877)</u>
PERCENTAGE CHANGES FROM PRIOR YEAR		<u>(3.7%)</u>		<u>(.7%)</u>	

There were a number of capital expenditures that, by division, varied by more than plus or minus \$500,000 between 2007 and 2008. The total net decrease was approximately \$162,000. The overall percentage decrease is 0.7% compared to the 3.7% decrease last year. The following is a summary of the more significant changes in these capital costs.

- Capital costs for the San Luis Division increased \$1.0 million due primarily to a \$2.0 million settlement related to a condemnation lawsuit involving the San Luis Canal and Arroyo Pasajero Flood Control Improvement Project for expansion of the Arroyo Pasajero Westside Detention Basin, of which 51% was allocated to the contractors and the remaining 45% is to be reimbursed to the Department from the United States Bureau of Reclamation. The settlement was for the value of land that the Department sought property rights for, as well as interest and litigation fees incurred during the mediation process. The Department appropriately capitalized these costs in accordance with its Cost Classification Policy, which states that settlement amounts over \$1 million will be capitalized.
- The decrease in Tehachapi Division capital costs is primarily due to a \$3.1 million decrease in costs for the units 2, 4 and 6 pump replacement project at the Edmonston Pumping Plant due to completion of the work in 2008. The Department expended \$3.8 million in 2007 and \$0.6 million in 2008 for the pump replacement work at Edmonston.

- The increase in the Mojave Division capital costs of \$4.3 million is due to the penstock bypass line connection at the Mojave Siphon Powerplant, Horsethief Creek Bridge–Mojave Siphon maintenance road project, and the Cedar Springs maintenance building project. The penstock bypass line connection project, which is the reconnection of an abandoned concrete pipe to an existing pipeline for future use at the Mojave Siphon Powerplant, increased costs by \$1.5 million as a result of most of the work occurring in 2008. The Department spent \$0.2 million in 2007 compared to \$1.7 million in 2008. The Horsethief Creek Bridge–Mojave Siphon maintenance road project resulted in an increase of \$0.7 million due to more work on this project being performed in 2008 compared to 2007, with \$1.4 million being incurred in 2008 compared to \$0.7 million in 2007. The Cedar Springs maintenance building project, which started in January 2008 and will continue until January 2009, increased costs by \$1.9 million.
- The overall decrease in Santa Ana Division capital costs of \$2.3 million is due to the reallocation of expenditures for the Lake Perris mitigation project, which was partially offset by the Santa Ana pipeline repair project. The Department reallocated \$3 million of Lake Perris mitigation project costs from a transportation reach cost center to a recreation cost center due to these costs being recreation-related. This decrease was partially offset by an increase of \$0.8 million in the Santa Ana pipeline repair project, which began late in 2007.
- Capital costs for the West Branch increased \$1 million due to increased expenditures for the Oso Building Water Treatment and Storage project of \$2 million and for the Vista Del Lago Visitor Center emergency repair project of \$0.7 million. These increases were offset by decreases from the Lower Quail Canal seepage blanket project of \$0.7 million and the Peace Valley Pipeline repair project of \$1.1 million, due to these projects being completed in 2007. The Oso project started in December 2007, with most of the costs, totaling \$2 million, being incurred in 2008. The Vista Del Lago project started late 2007, where \$0.2 million of costs were incurred, and ended in November 2008, with \$0.9 million of costs being incurred in 2008.
- The overall decrease of the Oroville water supply and power costs of \$1.4 million is due to an increase of \$1.9 million for the Thermalito Afterbay Dam Well replacement project that began in 2008, offset by decreases of \$3 million due to the Hyatt Turbine Replacement project being completed in 2007 and \$0.3 million due to the JEM Farm environmental easement project being completed in 2007.

Mobile Equipment

During our 2009 audit, we noted that there are costs paid for by the Water Resources Revolving Fund totaling approximately \$28,844,000, \$12,749,000 of which has not been recovered, for items such as refurbishment of the headquarters building and mobile equipment purchases. The contractors have already been billed for \$12,527,000 to recover these costs. While a portion of the \$12,749,000 of

unreimbursed costs are not State Water Project related, approximately \$11,769,000 are considered general management expenses and will be partially billed to the contractors as an indirect cost. The Department has not yet determined how to allocate these balances between project and non-project cost centers. However, it is likely that the portion allocated to the State Water Project will be included in the overhead rates and collected through the transportation minimum component. In 2008, the Flood Management Division reimbursed \$3,050,000 of mobile equipment costs, leaving \$913,000 of unreimbursed mobile equipment costs. The Department has not included any of these unreimbursed costs in the 2010 Statement of Charges. We will continue to monitor this situation.

RECREATION

Although the primary purpose of the Project is to supply water throughout the State, the Project also provides recreational and wildlife benefits such as lakes, aqueduct bikeways, fishing access sites and other aquatic areas. Water supply costs are reimbursable by the water contractors, whereas recreation costs are not. The Department recovers the costs of recreation and wildlife facilities from the appropriate State agency or suspends these costs until reimbursement is available. In addition, the Department allocates a portion of the joint costs of multipurpose facilities to non-water supply Project purposes and excludes these costs from amounts charged to the contractors.

As a result of AB 1442, the “offset legislation” enacted in September 1989, a lump sum reimbursement to the Department for recreation and wildlife enhancement expenditures incurred through June 30, 1988 has been offset against monies owed the California Water Fund by the State Water Project in the amount of \$172,291,000. Of this amount, \$155,087,000 is for capital expenditures and \$17,204,000 is for operating costs. Under the offset legislation, interest accruals on unreimbursed expenditures were terminated on June 30, 1988. The legislation allows for continued reimbursement of annual expenditures subsequent to June 30, 1988 with approval by the Legislature of the Department’s cost allocations up to a maximum of \$30 million. Unreimbursed capital and O&M costs incurred since June 30, 1988 total approximately \$209 million as of June 30, 2009. This amount was reduced by provisions made by the Legislature in the 1994/95 and 1995/96 budgets which offset \$24.7 and \$5.3 million, respectively, of these costs against the State Water Project’s liability to the California Water Fund. The Department will then be required to seek reimbursement of the additional \$179 million of recreation expenditures through some other mechanism. In 2006, the Department submitted a request through the Department of Finance for reimbursement of \$11.5 million from the General Fund for these recreation expenditures, but it was not approved.

In addition to these unreimbursed recreation costs, the State’s share of costs under the Suisun Marsh Preservation Agreement have not been reimbursed since June 30, 1988. These costs total approximately \$23.7 million as of December 31, 2008.

A workgroup of water contractors and auditors have been meeting to study this situation. While the group determined that the issue would be put on hold until more favorable economic conditions prevailed in the State, this issue resurfaced during 2006 after the Department’s legal counsel determined that the Department was billing the contractors for the recreation debt service costs. Beginning with the issuance of Series W Water System Revenue Bonds in May 2001, the bond resolutions were revised to indicate that since the State of California has not been reimbursing the Department for its share of recreation costs, the Department would have to collect these costs from the contractors. The Department determined that Water System Revenue Bond construction proceeds of \$30,807,000 are allocable to recreation. To recover these recreation costs from the contractors, the Department included \$1,648,000 in the Surcharge beginning with the 2002 Surcharges. This change in procedures resulted in charging the contractors for

all past recreation capital costs that were financed with Water System Revenue Bonds. In evaluating Metropolitan's claim against the Department for unresolved billing issues in 2007, the Department's legal counsel determined that Water Code Section 11912 (part of Davis-Dolwig Act) prohibits the Department from including the costs of the development of recreation, or for fish and wildlife, in charges to the water contractors. These costs are the responsibility of the State of California general fund or other available funds. Consequently, this debt service charge was removed from the Surcharge beginning with the 2007 Surcharge.

As a partial solutions for funding recreation debt service costs, the Department revised the recreation allocation percentage for certain Delta facilities costs from 14% to 3.3% for minimum and 3.4% for capital beginning in the April 2007 revision of the 2007 Statement of Charges, which shifted additional costs retroactively to Metropolitan and the other contractors. The impact of this reallocation of costs was a cumulative increase to Metropolitan's conservation capital and minimum components by \$7,840,000 and \$5,553,000, respectively, in the 2007 through 2010 Statements of Charges. In May 2008, the Department obtained a loan for the remaining unfunded recreation costs. The loan will be repaid from surplus revenues in the State Water Facilities Capital Account, established as part of the Monterey Amendment. Recreation capital costs will also be funded from the Facilities Capital Account until reimbursement from the General Fund is received, however, the Department projects that this account will be in a deficit position by 2010. A more detailed discussion of unreimbursed recreation costs can be found in the Unresolved Issues Related to the 2010 Statement of Charges section on page 3 of this report. The workgroup of water contractors is meeting regularly to work with the Department to resolve the funding issues.

INDIRECT COSTS

The Department incurs overhead costs for general management, line management, staff benefits, prorated operating expenses, line staff and rent. These costs are recovered from the benefiting users through an allocation process based on the actual salaries and wages of each organization involved. The Department determines the activity rates each month using the actual costs expended for that month, and any variances that exist between the amount of salary, benefit and indirect costs billed to the program cost centers and the amount actually incurred are cleared at the end of each month.

Indirect costs increased by \$9,516,889 or 6%, between fiscal years 2007-08 and 2008-09. A comparison of these indirect costs is shown below.

COMPARISON OF INDIRECT COSTS

	Fiscal Year 2008	Fiscal Year 2009	Increase (Decrease)	Percentage Increase (Decrease)
Staff Benefits	\$ 68,717,059	\$ 73,023,184	\$ 4,306,125	6%
Rent	14,760,106	11,320,790	(3,439,316)	(23%)
Pro-Rated State Operating Costs	8,111,703	9,335,078	1,223,375	15%
General Management and				
Administration	38,199,833	41,279,084	3,079,251	8%
Line Management	24,275,525	29,053,085	4,777,560	20%
Field Division Line Management				
Oroville Field Division	1,180,925	949,112	(231,813)	(20%)
Delta Field Division	896,874	756,927	(139,947)	(16%)
San Luis Field Division	793,678	811,672	17,994	2%
San Joaquin Division	1,390,910	1,431,497	40,587	3%
Southern Field Division	1,533,467	1,337,845	(195,622)	(13%)
Chemical Laboratory	736,811	815,506	78,695	11%
	<u>\$160,596,891</u>	<u>\$170,113,780</u>	<u>\$ 9,516,889</u>	<u>6%</u>

Explanation of Unusual Cost Increases and Decreases

Staff Benefits: The increase in staff benefits is due primarily to increases in health insurance costs of \$1.3 million, retirement costs of \$1 million, other miscellaneous payroll-related costs of \$0.9 million and social security costs of \$0.5 million largely due to increases in salaries and increased health care costs.

Rent: The decrease in rent is due to a reduction in rent rates and reorganizations within the Department that moved personnel from leased buildings to Department-owned facilities.

Pro-Rated State Operating Costs: The increase in these state operating costs is due primarily to increased IT expenditures for upgrades at the State level that are passed on to the Department and other State agencies.

General Management and Administration: The cost increases are the result of increased expenditures by the Division of Technical Services for updating the Department's servers and computer systems and related consultant services.

Line Management: The increase in line management is due primarily to program and personnel increases, in the Flood Control Management Division as a result of efforts to reduce the risks of floods statewide. Increases were also noted in the Engineering Division for purchases of software, hardware and the use of IT consultants.

State Government Costs

Each year, the Department pays a portion of the overhead costs of the State of California. These costs are billed and collected by the Department of Finance as State government costs. The following schedule identifies annual fluctuations of actual State government costs for 2006-07 and 2007-08 and estimated State government costs for 2008-09 and 2009-10.

	Actual		Estimated	
	2006-07	2007-08	2008-09	2009-10
Health benefits for retirees	\$ 11,282,545	\$ 10,665,355	\$ 13,940,989	\$ 12,753,388
Legislature	1,897,713	1,853,219	2,037,087	1,914,304
Personnel Board	90,053	188,265	183,283	211,583
State Controller	915,050	846,379	979,406	785,652
Department of Finance	567,442	622,616	554,152	551,248
Other	435,747	567,627	531,077	961,167
	<u>\$ 15,188,550</u>	<u>\$ 14,743,461</u>	<u>\$ 18,225,994</u>	<u>\$ 17,177,342</u>
Percentage increase over the prior fiscal year		<u>(2.93%)</u>	<u>23.62%</u>	<u>(5.75%)</u>

The estimated costs for 2009-10 decreased by \$1,048,652, or 5.75% from 2008-09 estimates and the actual fiscal year 2007-08 costs were lower than what was estimated for 2008-09 by \$3,482,533 or 23.62%. The decrease in actual costs for fiscal year 2007-08 from fiscal year 2006-07 of \$445,089 is primarily due to a \$.6 million decrease in health benefits for retired employees because of the variations in computing the Department's pro rata share in relation to other State agencies. The decrease in the Department's share of the estimated health benefit costs is also the primary cause for the overall decrease in the estimated costs from 2008-09 to 2009-10. The increase in the other category of costs of \$0.4 million is due to new charges in 2009-10 for the Office of the State Chief Information Officer, the Governor's Office and the Office of Planning and Research.

EXTENSION OF TIME TO PROTEST

Article 29 of the Water Supply Contracts permits the State Water Contractors to submit notices to the Department if they wish to contest specific charges in their bills. For the 2005 and prior Statements of Charges, the Department has issued an “Extension of Time to Protest” that identifies areas that are to remain open for adjustment until the following December. Based on the representations made by the Department in these memos, Metropolitan did not submit a notice of contest in the past. The Department did not issue an “Extension of Time to Protest” memo in December 2005, and, as a result, in December 2005, Metropolitan and other contractors submitted notices of contest to the Department regarding the issues and audit findings related to the 2006 Statement of Charges. In addition, Metropolitan filed a claim with the Victim Compensation and Government Claims Board, which was rejected on March 16, 2006.

In lieu of issuing an “Extension of Time to Protest” memo, in 2007, the Department entered into separate Tolling and Waiver Agreements with Metropolitan and 24 other water contractors. The Agreements tolled (i.e. suspended) the running of the time period for the filing of contractor protests for the 2007 Statement of Charges and tolled other specified statutes of limitations through December 31, 2008. The Agreements also extended the tolling period regarding Metropolitan’s claim through December 31, 2008. A second amendment to the tolling agreement extended the tolling period to September 30, 2009, and included the 2009 Statement of Charges. A third amendment has been executed that extends the tolling period for pursuing claims through December 31, 2010 and includes the 2010 and 2011 Statements of Charges. Certain recreation-related costs incurred at Perris Reservoir have been specifically excluded from the amended tolling agreement. In addition, the change in funding of the costs of the San Joaquin Valley Drainage program from the Capital Facilities Account to operations and maintenance costs beginning in 2006, and all costs related to the determination, allocation or payment of fish and wildlife enhancement and recreation costs incurred in constructing, operating and maintaining Perris Reservoir or related facilities to address seismic safety issues may be excluded from tolling upon 60 days advance notice. The Department and the contractors have been engaging in discussions regarding the issues being tolled by the Tolling and Waiver Agreements.

PENDING LITIGATION

During our auditing procedures, we were made aware of the following litigation, claims and assessments with potential exposure to the State Water Project of more than \$1,000,000.

Cortopassi Partners et al. v. California Department of Water Resources, et al.: In February, 2008, a local reclamation district and a large landowner with property bordering the Mokelumne River in the North Delta brought suit against three State agencies, including the Department, with flood management responsibilities in the Delta. The suit alleges that sedimentation has been allowed to build up in the Mokelumne River and in adjacent channels because of a lack of dredging and that such buildup presents an unreasonable risk of flooding. The suit also alleges that the State Water Project water conveyance operations in the Delta contributed to the buildup. The suit seeks injunctive and declaratory relief to require remedial actions to be taken, but does not seek monetary damages. After a successful motion by the defendant State agencies, the plaintiffs redrafted their complaint, which included adding a claim that the Department is breaching its contract with the North Delta Water Agency regarding State Water Project water flows through the North Delta. The case is in the pretrial stage. The Department believes that the potential for an unfavorable outcome is uncertain.

Claim of Metropolitan Water District of Southern California: Article 29 of the Water Supply Contracts permits the State Water Contractors to submit notices to the Department if they wish to contest specific charges in their bills. In December 2005, Metropolitan and other contractors submitted notices of contest to the Department regarding items in the bills the Department sent to the water contractors for calendar year 2006. In addition, Metropolitan filed a claim raising the same contentions with the Victim Compensation and Government Claims Board (Claims Board). On March 16, 2006, the Claims Board rejected Metropolitan's claim. The Department and Metropolitan agreed to a tolling agreement, which suspended the running of the statute of limitations from September 1, 2006 through March 31, 2007. The statute of limitations was further extended to December 31, 2008 in a Tolling and Waiver Agreement that was signed in 2007 by Metropolitan and 24 other contractors. The parties are also in the process of executing an amendment to the 2007 Tolling and Waiver Agreement to extend the expiration date to September 30, 2010. See additional discussion of the Tolling and Waiver Agreement below.

The Department has determined that the claim by Metropolitan that the Department had been improperly charging the water contractors for the portion of revenue bond debt service attributable to the recreation and fish and wildlife enhancement portion of certain State Water Project facilities has merit. As a result, the Department made corrections, with interest, to current and past bills of all water contractors in December 2006 and April 2007 to remove the recreation and fish and wildlife charges previously included in the water contractors charges. In addition, the Department is continuing to evaluate the other items being protested. If any of those protested items are found to have merit, such a finding could result in additional corrections to charges specified in the contractors' bills. This in turn could result, among

other things, in a shift of financial benefits and cost responsibilities among individual water contractors or a determination that sources other than the water contractors are responsible for the particular charges. The Department's legal counsel believes the potential for an unfavorable outcome is uncertain.

2007 Tolling and Waiver Agreements between the Department and the Water Contractors: In 2007 the Department entered into separate Tolling and Waiver Agreements with 28 water contractors. The Agreements tolled (i.e. suspended) the running of the time period for the filing of contractor protests regarding the original and revised 2007 Statements of Charges and tolled other specified statutes of limitations through December 31, 2008. The Agreements also extended the tolling period regarding Metropolitan's claim through December 31, 2008. In addition, the Agreement included waivers by the contractors of certain potential claims, which are designed to facilitate the continuation of the State Water Project's long-term revenue bond and commercial paper financing programs. The parties have executed amendments to the Tolling and Waiver Agreement to add the Statements of Charges for 2008 through 2011 to the items covered by the tolling provisions. The Department and the contractors have been engaging in discussions regarding the issues being tolled by the Tolling and Waiver Agreements with the objective of resolving those issues. The contractors and the Department have also extended the Tolling and Waiver Agreement to December 31, 2010. The resolution of the issues being tolled by Tolling and Waiver Agreements is uncertain.

Whitaker Contractors, Inc.: In November 2005, the Department terminated for default its construction contractor, Whitaker Contractors, Inc. (Contractor), for the Tehachapi Afterbay Completion Project. As a result, the Department issued three contracts to other contractors to complete the Contractor's work. The Contractor, which is alleging that it was wrongfully terminated by the Department, has filed a claim with the Claims Board and a separate complaint in arbitration for damages in the approximate amount of \$20 million. The Department's position is that the default termination was proper and that it is entitled to damages of a similar magnitude, which includes liquidated damages and excess costs to complete the work of the Contractor's contract. On September 25, 2006, the Office of Administrative Hearings rejected the Contractor's complaint in arbitration as being filed untimely. As per this ruling, the Contractor was free to refile for arbitration subsequent to 240 days after the Department's future acceptance of the remaining project work, sometime in late 2007 or thereafter. On November 10, 2007, the Department filed its own complaint in arbitration against the Contractor. The Department's complaint seeks damages in excess of \$13 million from the Contractor. The Contractor thereafter re-filed its complaint against the Department and both complaints are being heard in the same proceeding. The arbitration hearing is expected to begin in January, 2010. The Department's legal counsel believes the outcome of this case is uncertain.

Pacific Gas & Electric Company, et al.: In December 2005, a group of California entities filed separate claims against a number of California governmental entities, including the Department, to obtain partial

refunds from the sellers of energy and related services in 2000 and 2001 on the grounds that the rates charged for the energy and services had not been reasonable. These claims contained contentions regarding partial refunds that were made in the FERC proceeding described in the “San Diego Gas and Electric Company, et al.” section. This claim was filed with the Claims Board as a result of the 9th Circuit Court of Appeals’ ruling September 2005 that FERC lacked jurisdiction under the Federal Power Act to order governmental entities, such as the Department, to provide such refunds. The claims were denied by the Claims Board on April 20, 2006. The Department entered into a tolling agreement with the claimants on August 22, 2006. Under the tolling agreement, the running of the statute of limitations is being suspended through March 1, 2010. The Department’s legal counsel believes that the outcome of this case is uncertain.

Armando P. Vanni et al. v. Rindge Land Reclamation District # 2039: This case is a consolidation of four cases filed in the Superior Court of California, San Joaquin County: New Market Underwriters Insurance Company et. al v. Rindge Land Reclamation District No. 2039 et al., BNSF Railway Company v. Upper Jones Reclamation District No. 2039 et al., and Vanni v. Rindge Land Reclamation District #2039 which were all filed in 2005. These actions arose from a Delta levee failure that caused flooding of Upper Jones Tract and Lower Jones Tract on June 3, 2004. Insurance companies for the East Bay Municipal Utility District and the BNSF Railway Company, in two separate lawsuits, sued the local reclamation district, the Reclamation Board and the Department. Among other things, the complaints allege that the State Water Project’s activities in the Delta were a cause of the flooding. The fourth case did not name the Department as a defendant. The consolidated cases are currently in the pre-trial stage. At present, the outcome of this lawsuit is uncertain, according to the Department’s legal counsel.

Arata v. State of California, Santa Clara County Superior Court Case No. 109CV150516. The plaintiffs reside in Milpitas on a hillside with a known, active landslide. The Department’s pipeline, part of the South Bay Aqueduct, runs underneath a road that is approximately 100 yards downhill from the plaintiffs’ home. In 2006, the Department performed repairs to the pipeline, which had become misshapen due to the pressure of the landslide and was in danger of failure. The plaintiffs claim that the work performed by the Department caused the speed of the landslide to increase, resulting in severe damage to the home. The house is valued at over \$1.0 million. The Department is preparing a response to the complaint. The potential for an unfavorable result is uncertain.

The following litigation, claims or assessments reported in our prior year report were resolved in the current year:

Alameda County Flood Control & Water Conservation District Zone 7, et al. v. Department of Water Resources: On April 25, 2005, 14 contractors (Plaintiffs) filed a lawsuit against the Department in Sacramento County Superior Court (Court) for declaratory relief and breach of contract. The complaint, served on the Department on April 29, 2005, alleges that pursuant to the Water Supply Contracts, the

Department failed to credit all revenues from power generated by SWP conservation facilities to the Delta Water Charge, and as a result has overcharged the Plaintiffs. The complaint seeks a declaration that all benefits derived from the sale or other disposal of power from conservation facilities be credited in conformity with the terms of the Water Supply Contracts, and damages and costs in an unspecified amount. The Department's administrative decision regarding the appropriate method of apportioning project power revenues was made in the late 1970's after a series of meetings with the SWP contractors. If the Plaintiffs' view was adopted, large SWP power users requiring the most pumping to get their water, such as Metropolitan, would pay more to the Department under their Water Supply Contract, while those contractors requiring less pumping, would pay less.

On June 29, 2005, the Department filed a demurrer to the complaint. On August 26, 2005, the Court overruled the demurrer and ordered the Department to answer. The Department filed its answer on September 6, 2005. On December 12, 2005, 13 southern State Water Contractors received court permission to intervene in the lawsuit as defendants. These defendants-interveners are essentially intervening in support of the method the Department currently employs for crediting the revenues from SWP conservation facilities. The Plaintiffs have filed an amended complaint joining two additional southern contractors as indispensable parties and adding several new causes of action, including unjust enrichment against interveners. The Court granted the Department's motion to bifurcate the trial into liability and damages phases. The court denied both sides' motions for summary judgment. A non-jury trial was held in November and December 2008. In October 2009, the Court issued its decision in favor of the Department and the Contractors which intervened in support of the Department, finding that the Department's determinations and administration of the provisions regarding conservation facilities power revenue credits were consistent with the Water Supply Contracts. Unless the plaintiffs decide to request the Superior Court to modify or vacate its decision or decide to appeal the decision to the Court of Appeal and are successful in doing so, the decision in favor of the Department and intervenors will be final.

State of California v. Oakland Scavenger Company, et al.: This is an eminent domain action by the Department to acquire fee title to 72 acres of land for the planned construction of Dyer Reservoir, part of the South Bay Aqueduct Improvement and Enlargement Project. The property is located on approximately 1,500 acres of land owned by the Oakland Scavenger Company (Company), which operates a dump. The Company is planning to expand the dump and had earmarked a portion of its property, including the 72 acres the Department is condemning, as mitigation for the proposed expansion.

On June 17, 2005, the Department obtained an Order for Possession. The only remaining issue is one of valuation of the land. On October 24, 2006, the Company served a demand on the Department for approximately \$5.2 million. The matter was settled in July 2009 and the Department agreed to pay \$975,000, which covers the property interests taken (fee, permanent easement, temporary easement), any severance damage and interest. The case is now closed.

PROJECT INTEREST RATE

The Water Supply Contract established a Project Interest Rate (PIR) to recover the interest costs of debt used to finance construction of Project facilities through the issuance of Water System Revenue or General Obligation bonds. This rate is computed by the Department using a weighted average of principal and interest costs over the life of the Project. In March 1987, Metropolitan signed Amendment No. 20 to the Water Service Contract. This Amendment effectively exempts from the PIR computations subsequent Water System Revenue Bond issues used to finance water system facilities; however, the Department includes Water System Revenue Bonds in the PIR computation to the extent they were used to refinance on-aqueduct power facilities (Alamo, Pyramid and Small Hydro). Off-aqueduct bond costs are charged directly to the contractors; therefore, the retirement of off-aqueduct bonds does not affect the PIR. The following Water System Revenue Bonds are included in the PIR computation: \$195 million of Series J, \$2 million of Series L, \$10 million of Series Q, \$20 million of Series S, \$7 million of Series U, \$73 million of Series W-1, \$4 million of Series W-2 and \$23 million of Series X. The PIR did not change for the 2010 Statement of Charges since no on-aqueduct power facilities bonds were refunded during the year.

SETTLEMENT LETTERS

As a result of agreements between the Department and representatives of the water contractors over specific issues of protest, 11 “settlement letters” and one “concurrence letter” are currently in effect:

- ◆ The “prior capital costs” settlement letter sent to all contractors on August 23, 1966, covering certain capital costs incurred prior to December 31, 1960.
- ◆ The “interest calculation” settlement letter sent to all contractors on December 6, 1966, covering interest calculations under the transportation charge and the Delta Water Charge.
- ◆ The “proportionate use” settlement letter sent to all contractors on May 9, 1967, covering proportionate use cost allocations under Article 24(b) of the Water Supply Contracts.
- ◆ The “reaches 1 through 7” concurrence letter sent to all contractors on March 25, 1969, covering the allocation of costs of reaches 1 through 7 of the California Aqueduct and San Luis Reservoir between the purposes of transportation and conservation.
- ◆ The “capital costs 1967” settlement letter sent to all contractors on November 2, 1970, covering certain capital costs incurred during calendar year 1967.
- ◆ The “proportionate use of South Bay Aqueduct reaches” settlement letter sent to the South Bay Aqueduct contractors on March 6, 1971 (this letter was not signed by and does not directly affect the District).
- ◆ The “capital costs 1968” settlement letter sent to all contractors on March 21, 1972, covering certain capital costs incurred during calendar year 1968.
- ◆ The “capital costs 1969-70” settlement letter sent to all contractors on June 26, 1974, covering certain capital costs incurred during calendar years 1969 and 1970.
- ◆ The “capital costs 1971-72” settlement letter sent to all contractors on November 26, 1975, covering certain capital costs incurred during calendar years 1971 and 1972.
- ◆ The “capital costs 1973-76” settlement letter sent to all contractors on July 19, 1978, covering certain capital costs incurred from January 1, 1973 through June 30, 1976.

TABLE A
Summary of Settled Audit Findings Resulting in Changes to
the 2010 Statement of Charges

Throughout the year, we worked with Metropolitan's representatives and the Department to resolve audit exceptions. The following is a brief summary of the items resolved during 2009 which affected the 2010 Statement of Charges. A more detailed description of these items starts on page 11.

Items	Effect on Metropolitan's 2010 Costs Increase (Decrease)
<u>Previously Reported Findings</u>	
1. MWQI costs for 1999 through 2004 were corrected. (Refer to page 11)	\$ (5,853,000)
2. Water table redistribution entries for 2006 and 2007 to allocate costs between the minimum and variable charges were calculated using updated water information. (Refer to page 11)	(4,716,000)
3. Technology improvement cost estimates of \$15,589,000 included twice in the Delta Water Charge and estimates of \$8,055,000 included twice in the transportation minimum charges were removed. (Refer to page 12)	(3,561,000)
4. Special engineering cost estimates for 2008 through 2013, overstated by \$63,928,000 in the prior year calculation of the Delta Water Charge capital and transportation capital components, were revised. (Refer to page 12).	(1,243,000)
5. Coastal Branch power charges included in the 2009 variable component were corrected. (Refer to page 12)	(923,000)
6. Tehachapi Second Afterbay 2009 debt service included in the calculation of the variable component were revised to actual. (Refer to page 12)	(830,000)
7. Credits totaling \$2,376,000 for 2007 wheeling water transactions were properly recorded in the cost accounting system. (Refer to page 12)	(462,000)
8. Lake Perris mitigation cost projections totaling \$2.1 million were properly removed from the contractors' bills. (Refer to pages 12 and 13)	(125,000)
9. The 2008 and 2009 recovery generation amounts for Alamo and Mojave Siphon included in the variable component calculation were corrected. (Refer to page 13)	(54,000)
10. Payments received from the USBR totaling \$166,000 for San Luis were properly recorded in the accounting system. (Refer to page 13)	(7,000)
11. Oroville revenues incorrectly included in the Delta Water Rate calculation for 2035 were reduced by \$4,960,000. (Refer to page 25)	44,000
12. MWQI charges billed through the Statement of Charges were corrected. (Refer to page 13)	73,000

Items	Effect on Metropolitan's 2010 Costs Increase (Decrease)
13. Credits for Hyatt Thermalito O&M costs for 2004 through 2007 and FERC relicensing costs for 1999 through 2007 were partially corrected in the Delta Water Rate calculation. (Refer to page 13)	284,000
NET BENEFIT	<u><u>\$(17,373,000)</u></u>

TABLE B
Summary of Audit Findings Projected to Result in Changes to
the 2011 Statement of Charges

Throughout our examination, we worked with Department and Metropolitan representatives to resolve findings which arose during our audit of the 2010 Statement of Charges. We will work with the Department to ensure the correction of these findings in the 2011 Statement of Charges. The items are discussed in detail starting on page 14 of this report. The items are summarized as follows:

Items	Effect on Metropolitan's 2011 Costs Increase (Decrease)
<u>New Findings</u>	
1. Metropolitan's 2008 variable calculated component was overstated due to the use of incorrect unit rates. (Refer to page 14)	\$ (4,242,000)
2. Monterey Amendment Litigation costs totaling \$8.4 million were included twice in the transportation minimum component. (Refer to page 14)	(3,686,000)
3. Refurbishment costs for Hyatt Units 1, 3 and 5 totaling \$6.1 million were incorrectly included in the Delta Water Charge and variable components. (Refer to page 14)	(257,000)
4. Bay Delta Conservation Plan charges for 2007, 2008 and 2009 totaling \$7.5 million were incorrectly included in the transportation and conservation minimum components. (Refer to page 14)	(242,000)
5. The exchange of 10,033 acre-feet of demonstration water from the Kern Water Bank has not been credited to the system power costs. (Refer to page 14)	(138,000)
6. The debt service credit included in the Delta Water Charge to offset the refurbishment costs for Hyatt Units 2, 4 and 6, is understated by \$1.7 million. (Refer to pages 14 and 15)	(56,000)
7. The present value of water used in the calculation of the Delta Water Rate was based on outdated information. (Refer to page 15)	(30,000)
8. Charges totaling \$41,000 for a 2007 4 th of July event were incorrectly assessed to the contractors in 2009. (Refer to page 15)	(1,000)
9. Litigation settlement costs were allocated manually rather than through the SAP cost allocation system. (Refer to page 15)	2,000
10. The 2010 recovery generation amounts for Alamo and Mojave Siphon, included in the variable component calculation, are understated by \$1,072,000. (Refer to page 15)	2,000
11. Oroville flood control charges for 2008 totaling \$201,000 were excluded from the Delta Water Rate calculation. (Refer to page 15)	7,000

Items	Effect on Metropolitan's 2011 Costs Increase (Decrease)
12. The fish replacement charge unit rate computed for 2009 was used for calculating the 2010 charge, resulting in a \$109,000 understatement of the variable component. (Refer to page 16)	87,000
13. Accounting adjustments to correct the effect on the downstream distribution of energy costs were not reflected in the 2010 Statement of Charges. (Refer to page 16)	1,755,000
14. Conservation water delivered through Banks was not considered in the calculation of the downstream allocation of costs. (Refer to page 16)	4,188,000
	(2,611,000)
<u>Previously Reported Findings</u>	
15. The downstream reallocation of costs totaling \$23,432,000 were not reflected in the variable component calculation. (Refer to page 16)	(18,745,000)
16. Costs totaling \$13,374,000 for Gorman Creek Improvement Channel emergency repairs were included in the transportation minimum component instead of the transportation capital component. (Refer to pages 16 and 17)	(11,276,000)
17. Variable energy charges, billed outside of the SAP accounting system, are overstated by approximately \$324,000 for 2006, \$6,245,000 for 2007 and \$4,012,000 for 2008. (Refer to page 17)	(8,465,000)
18. Hyatt-Thermalito operating costs for 1998 to 2000 and 2004 to 2008, included in the computation of the variable charges, were overstated \$6,536,000 and credits for Hyatt-Thermalito operating costs included in the Delta Water Charge were overstated by \$219,000. (Refer to page 17)	(5,834,000)
19. Delta cross channel pilot study costs and other Delta-related costs totaling \$4,112,000 have been allocated statewide instead of through the Delta Water Charge. (Refer to page 17)	(2,523,000)
20. Replacement costs for 2005 through 2008, used to calculate the variable replacement charge, were overstated by \$409,000 due to the use of outdated cost information and 2009 and 2010 costs totaling \$1,120,000 were allocated incorrectly. (Refer to page 17)	(1,429,000)
21. Adjustments related to 2009 and 2010 Thermalito Diversion Dam Powerplant capital cost repayment amounts totaling \$1,531,000 were erroneously included twice in the variable component. (Refer to page 18)	(1,225,000)
22. Metropolitan's November and December 2006 variable payments totaling \$940,000 were improperly excluded from the 2006 payment amount and the 2007 and 2008 payments are understated by \$5,000 and \$59,000, respectively, on Attachment 4C of the Statement of Charges. (Refer to page 18)	(1,195,000)
23. Peaking credits totaling \$1,884,000 for 1998 and 1999 were excluded from the computation of the variable component. (Refer to page 18)	(1,080,000)

Items	Effect on Metropolitan's 2011 Costs Increase (Decrease)
24. Coastal Extension debt service charges were erroneously included in the 2008 variable component instead of the Coastal Branch power charge. (Refer to page 18)	(923,000)
25. Final energy costs for 1998 were not recorded or were recorded incorrectly in the bills. (Refer to page 18)	(906,000)
26. Costs incurred at the Oroville facilities associated with FERC relicensing for 1999 to 2008 used in the transportation variable charge and the Delta Water Charge were outdated. (Refer to page 18)	(595,000)
27. Costs totaling \$92.9 million, partially allocated to recreation prior to the implementation of SAP, were billed entirely to the conservation minimum component. (Refer to pages 18 and 19)	(483,000)
28. The Los Angeles Department of Water and Power (LADWP) peaking credit was excluded from the computation of the 2005 variable component. (Refer to page 19)	(470,000)
29. Credits for wheeling water transactions for 2004 totaling \$229,000 and for 2008 totaling \$30,000 were not recorded in the cost accounting system. (Refer to page 19)	(110,000)
30. The adjustment to the 2007 rate management credit to correct errors in previous credits was understated. (Refer to page 19)	(79,000)
31. Deliveries of 5,000 acre-feet taken from storage in the San Joaquin Valley were billed as if they were delivered from the Delta. (Refer to page 19)	(73,000)
32. Hyatt-Thermalito operating costs, included as a credit in the Delta Water Charge, were understated \$855,000 for 2009 and \$766,000 for 2010. (Refer to page 19)	(51,000)
33. The 2007 recovery generation amounts for Alamo, Mojave Siphon, Warne, Castaic and Devil Canyon included in the variable component calculation are misstated by \$293,000. (Refer to page 20)	(35,000)
34. Recovery generation credits for San Luis, Devil Canyon and Warne Powerplants for 1998 were misstated by \$396,000. (Refer to page 20)	(22,000)
35. Lake Perris mitigation project costs for 2005 to 2007 totaling \$325,000 were allocated to the contractors instead of to the recreation purpose. (Refer to page 20)	(19,000)
36. Gianelli Pumping Plant replacement costs totaling \$167,000 were improperly included in the calculation of the Delta Water Charge. (Refer to page 20)	(8,000)
37. Power costs were understated and recovery generation credits were overstated by \$267,000 due to an incorrect 2002 Alamo mill rate and the use of an outdated 1999 San Luis amount. (Refer to page 20)	(7,000)
38. The fish replacement charge unit rate computed for 2008 was used for calculating the 2009 charge. (Refer to pages 20 and 21)	18,000

Items	Effect on Metropolitan's 2011 Costs Increase (Decrease)
39. Power costs and revenues, transmission, station service and peaking costs totaling \$31,747,000 for 1999 through 2005 were not recorded or were recorded incorrectly in the accounting system. (Refer to page 21)	61,000
40. Outdated debt service amounts were used to determine the Devil Canyon Second Afterbay charges for 2003 through 2008 in the variable component. (Refer to page 21)	91,000
41. Minimum transmission costs for 2006 and 2007 were understated by \$207,000 and station service charges for 2006 and 2008 were understated by \$881,000. (Refer to page 21)	707,000
42. Debt service amounts for the Tehachapi Second Afterbay were understated by \$939,000 for 2004 through 2008 in the calculation of the variable component. (Refer to page 21)	751,000
43. Incorrect wheeling credits, contractor payments and water amounts, and an error in the calculation of the present value of water was noted in the variable fish replacement charge. (Refer to page 21)	853,000
44. Costs totaling \$1,406,000 for the Division of Environmental Services relocation were omitted from the transportation minimum component. (Refer to page 21)	914,000
45. Hyatt-Thermalito Units 1, 3 and 5 refurbishment costs totaling \$1,241,000, were excluded from the variable component. (Refer to pages 21 and 22)	993,000
NET BENEFIT	<u>\$ (53,776,000)</u>

TABLE C**Summary of Audit Findings Resulting in Credits, Refunds and Adjustments**

Audit findings affect not only the Statement of Charges but also the amounts of credits, refunds and adjustments the Department issues to Metropolitan. The following is a brief summary of the items found during our audit that affect credits, refunds and adjustments. A more detailed description of these items starts on page 22.

Items	Effect on Metropolitan's 2011 Costs Increase (Decrease)
<u>Previously Reported Findings</u>	
1. Incorrect costs were used to compute the 1992 WSRB Surcharge and an inconsistent project purpose split was used to compute the 1990 to 1993 WSRB Surcharge. (Refer to page 22)	\$ (655,000)
2. Certain Coastal Branch capital cost repayment amounts were excluded from the computation of the 2000 WSRB Surcharge. (Refer to page 22)	(632,000)
3. Errors were noted in the calculation of the SMIF interest refund. (Refer to page 22)	<u>6,000</u>
NET BENEFIT	<u>\$ (1,281,000)</u>

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

COMPARISON OF THE 2010 STATEMENT OF CHARGES

TO THE DECEMBER REVISION OF THE 2010 STATEMENT OF CHARGES

(IN MILLIONS)

	Transportation Charge		Off-		Delta Water Charge		East Branch Enlargement		Water System Revenue Bonds		Total
	Capital	Minimum	Aqueduct Minimum	Variable	Capital	Minimum	Capital	Minimum			
2010 Statement of Charges dated July 1, 2009	\$ 73.4	\$ 140.0	\$ 92.8	\$ 202.1	\$ 25.0	\$ 47.0	\$ 30.1	\$ 5.2	\$ 35.1	\$ 650.7	
Revisions to estimated costs and error corrections	(12.5)	2.5	(0.3)		(2.9)	0.1		(0.8)		(13.9)	
2010 Statement of Charges dated December 31, 2009	\$ 60.9	\$ 142.5	\$ 92.5	\$ 202.1	\$ 22.1	\$ 47.1	\$ 30.1	\$ 4.4	\$ 35.1	\$ 636.8	

GLOSSARY

CAISO	California Independent System Operator
CARA	Cost Allocation and Repayment Analysis System
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
DFG	Department of Fish & Game
DHCCP	Delta Habitat Conservation and Conveyance Program
DRWD	Dudley Ridge Water District
DWR	Department of Water Resources
EBE	East Branch Enlargement
FALPOC	Final Allocation of Power Costs
FERC	Federal Energy Regulatory Commission
JOCC	Joint Operations Control Center
KCWA	Kern County Water Agency
KWB	Kern Water Bank
KWH	Kilowatt - hour
LADWP	Los Angeles Department of Power and Water
NPC	Nevada Power Company
O&M	Operations & Maintenance
OMP&R	Operations, Maintenance, Power and Replacements
PALPOC	Preliminary Allocation of Power Costs
PAYGO	Pay-As-You-Go Replacement Accounting System
PIR	Project Interest Rate
PUFF	Proportionate Use of Facilities Factor
RFDC	Reach Feature Distribution Code
SAP	The Department's business information and accounting system
SCADA	Supervisory Control and Data Acquisition software
SMIF	Surplus Money Investment Fund
SWC	State Water Contractors Association
SWP	State Water Project
SWPAO	State Water Project Analysis Office
UCA	Utility Cost Accounting
UCAB	The Department's billing system
USBR	United States Bureau of Reclamation
WSRB	Water System Revenue Bond